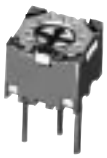
PVC6 Series

■ Features

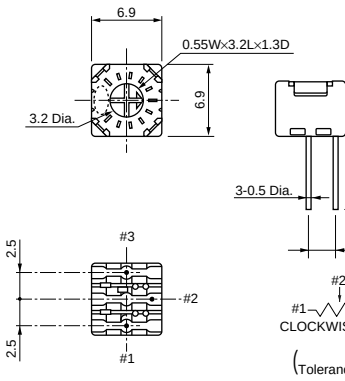
1. Enlarged and colored rotor provides superior adjustability.
2. Cone-shaped rotor improves driver insertion during automatic adjustment.
3. Available for "Zero" plus adjustment tool (taper head) use
4. Easy to see 11-scales adjustment positions.
5. Sealed construction protects the interior from dust and liquid, which achieves stable performance.
6. Available for ultrasonic cleaning after soldering
7. During cutting process by the inserter machine, the round shaped lead wire prevents clinch problems and realizes longer life of cutter than flat shaped lead wire.
8. Flammability: UL94V-0
9. To be complied with RoHS directive by new Cd free cermet resistive material. Pb free terminals with Sn plating.

■ Applications

1. DY
2. CRT display
3. Power supply
4. Professional cameras
5. CATV
6. FAX
7. Printers
8. OA Equipment
9. Sensors



PVC6A



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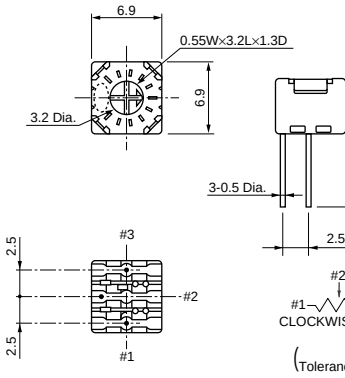
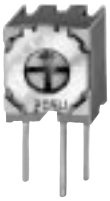
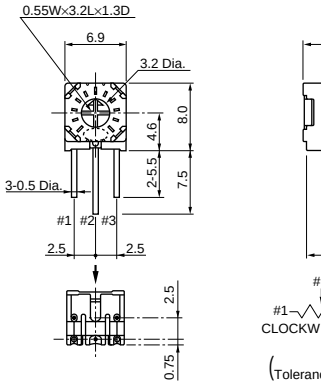
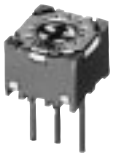


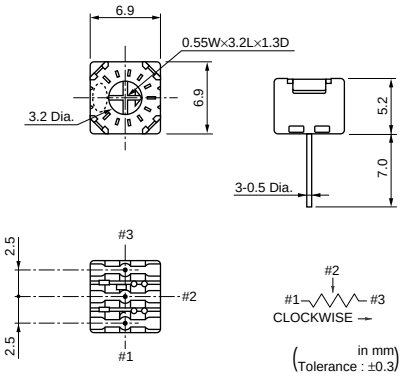


PVC6E

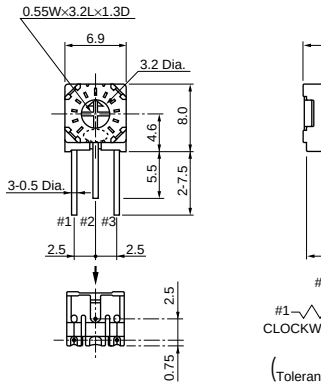




PVC6M



PVC6H



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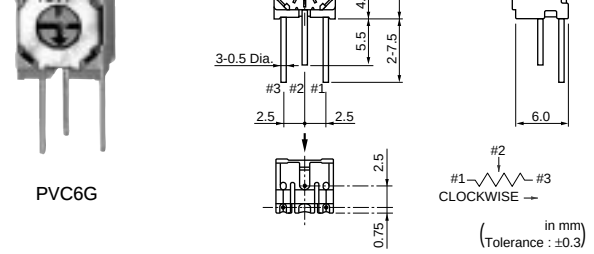
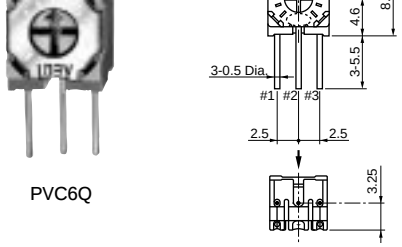


PVC6G



PVC6Q

Part Number	Power Rating	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR
PVC6□100C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm ±10%	±100ppm
PVC6□200C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	20ohm ±10%	±100ppm
PVC6□250C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	25ohm ±10%	±100ppm
PVC6□500C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	50ohm ±10%	±100ppm
PVC6□101C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	100ohm ±10%	±100ppm
PVC6□201C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	200ohm ±10%	±100ppm
PVC6□251C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	250ohm ±10%	±100ppm
PVC6□501C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	500ohm ±10%	±100ppm
PVC6□102C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	1k ohm ±10%	±100ppm
PVC6□202C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	2k ohm ±10%	±100ppm
PVC6□252C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	2.5k ohm ±10%	±100ppm
PVC6□502C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	5k ohm ±10%	±100ppm
PVC6□103C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	10k ohm ±10%	±100ppm
PVC6□203C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	20k ohm ±10%	±100ppm
PVC6□253C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	25k ohm ±10%	±100ppm
PVC6□503C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	50k ohm ±10%	±100ppm
PVC6□104C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	100k ohm ±10%	±100ppm
PVC6□204C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	200k ohm ±10%	±100ppm
PVC6□254C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	250k ohm ±10%	±100ppm
PVC6□504C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	500k ohm ±10%	±100ppm
PVC6□105C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	1M ohm ±10%	±100ppm
PVC6□205C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	2M ohm ±10%	±100ppm
PVC6□505C01	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	5M ohm ±10%	±100ppm
PVC6□100C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm ±10%	±100ppm
PVC6□200C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	20ohm ±10%	±100ppm
PVC6□250C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	25ohm ±10%	±100ppm
PVC6□500C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	50ohm ±10%	±100ppm
PVC6□101C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	100ohm ±10%	±100ppm
PVC6□201C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	200ohm ±10%	±100ppm
PVC6□251C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	250ohm ±10%	±100ppm
PVC6□501C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	500ohm ±10%	±100ppm
PVC6□102C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	1k ohm ±10%	±100ppm
PVC6□202C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	2k ohm ±10%	±100ppm
PVC6□252C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	2.5k ohm ±10%	±100ppm
PVC6□502C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	5k ohm ±10%	±100ppm
PVC6□103C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	10k ohm ±10%	±100ppm
PVC6□203C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	20k ohm ±10%	±100ppm
PVC6□253C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	25k ohm ±10%	±100ppm
PVC6□503C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	50k ohm ±10%	±100ppm
PVC6□104C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	100k ohm ±10%	±100ppm
PVC6□204C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	200k ohm ±10%	±100ppm
PVC6□254C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	250k ohm ±10%	±100ppm
PVC6□504C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	500k ohm ±10%	±100ppm
PVC6□105C04	0.5W(70°C)	Flow/Soldering Iron	1(240°±5°)	1M ohm ±10%	±100ppm

Continued on the following pa

Operating Temperature Range: -55 to 125 °C
The blank column is filled with the code of adjustment direction and lead type (A, D, E, G, H, M and Q).
The order quantity should be an integral multiple of the "Minimum Quantity" .
The last three digits express the individual specification codes. C01 for standard type and C04 for radial taping type (PVC6M/PVC6Q series only).

Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)	Remar
PVC6□100A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10 ohm±10%	±100	
PVC6□200A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	20 ohm±10%	±100	
PVC6□250A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	25 ohm±10%	±100	
PVC6□500A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	50 ohm±10%	±100	Non Star
PVC6□101A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	100 ohm±10%	±100	Produ
PVC6□201A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	200 ohm±10%	±100	(Cd Fr
PVC6□251A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	250 ohm±10%	±100	
PVC6□501A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	500 ohm±10%	±100	
PVC6□102A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	1k ohm±10%	±100	
PVC6□202A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2k ohm±10%	±100	
PVC6□252A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2.5k ohm±10%	±100	
PVC6□502A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	5k ohm±10%	±100	
PVC6□103A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10k ohm±10%	±100	
PVC6□203A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	20k ohm±10%	±100	
PVC6□253A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	25k ohm±10%	±100	Non Star
PVC6□503A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	50k ohm±10%	±100	Produ
PVC6□104A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	100k ohm±10%	±100	(Cd inclu
PVC6□204A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	200k ohm±10%	±100	
PVC6□254A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	250k ohm±10%	±100	
PVC6□504A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	500k ohm±10%	±100	
PVC6□105A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	1M ohm±10%	±100	
PVC6□205A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2M ohm±10%	±100	
PVC6□505A01	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	5M ohm±10%	±100	
PVC6□100A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10 ohm±10%	±100	
PVC6□200A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	20 ohm±10%	±100	
PVC6□250A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	25 ohm±10%	±100	
PVC6□500A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	50 ohm±10%	±100	Non Star
PVC6□101A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	100 ohm±10%	±100	Produ
PVC6□201A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	200 ohm±10%	±100	(Cd Fr
PVC6□251A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	250 ohm±10%	±100	
PVC6□501A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	500 ohm±10%	±100	
PVC6□102A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	1k ohm±10%	±100	
PVC6□202A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2k ohm±10%	±100	
PVC6□252A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2.5k ohm±10%	±100	
PVC6□502A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	5k ohm±10%	±100	
PVC6□103A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10k ohm±10%	±100	
PVC6□203A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	20k ohm±10%	±100	
PVC6□253A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	25k ohm±10%	±100	Non Star
PVC6□503A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	50k ohm±10%	±100	Produ
PVC6□104A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	100k ohm±10%	±100	(Cd inclu
PVC6□204A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	200k ohm±10%	±100	
PVC6□254A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	250k ohm±10%	±100	
PVC6□504A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	500k ohm±10%	±100	
PVC6□105A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	1M ohm±10%	±100	
PVC6□205A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	2M ohm±10%	±100	
PVC6□505A04	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	5M ohm±10%	±100	

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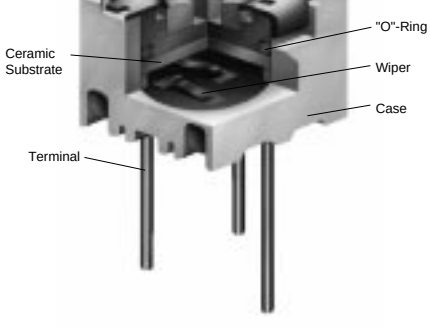
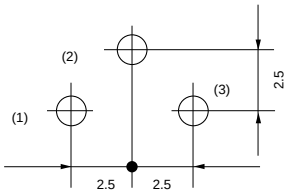


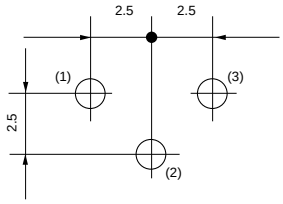
■ Mounting Holes

PVC6A/PVC6E



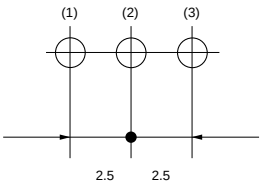
(Tolerance:±0.1 in mm)

PVC6D/PVC6H



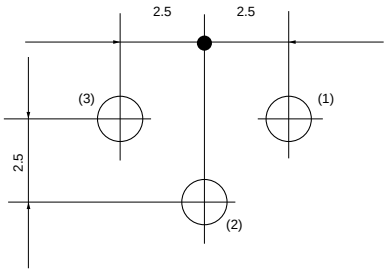
(Toleran in m

PVC6M/PVC6Q



(Tolerance:±0.1 in mm)

PVC6G



(Toleran in m

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muRata

Humidity	ΔV.S.S.	±1%
	IR	100Mohm min.
Vibration (20G)	ΔTR	±1%
	ΔV.S.S.	±1%
Shock (100G)	ΔTR	±1%
	ΔV.S.S.	±1%
Temperature Load Life	ΔTR	±2%
	ΔV.S.S.	±2%
Low Temperature Exposure	ΔTR	±2%
	ΔV.S.S.	±1%
High Temperature Exposure	ΔTR	±2%
	ΔV.S.S.	±1%
Rotational Life (200 cycles)	ΔTR	±4%

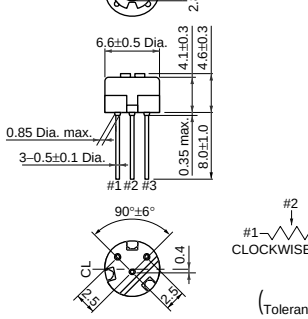
ΔTR : Total Resistance Change
ΔV.S.S. : Voltage Setting Stability
IR : Insulation Resistance

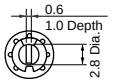
1. 6 standard terminal styles
2. Round shaped body enables smaller area mount than same 6mm square potentiometer.
3. Sealed construction protects the interior from dust and liquid, which achieves stable performance.
4. Available for ultrasonic cleaning after soldering
5. Flammability : UL94V-0

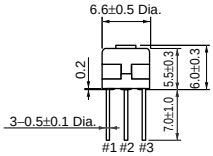
■ Applications

1. HDTVs
2. Professional cameras
3. CATV
4. FAX
5. Printers
6. Sensors
7. Power supply

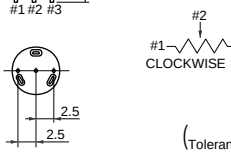
PV32H



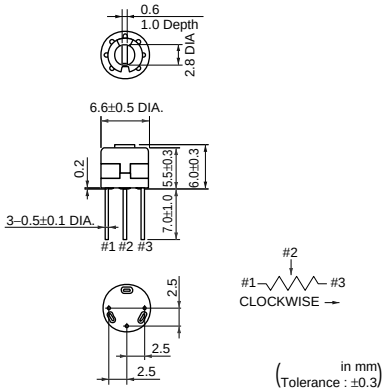




PV32R



PV32P



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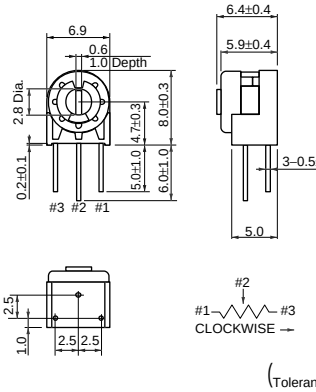
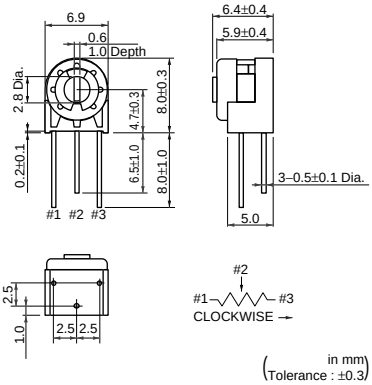
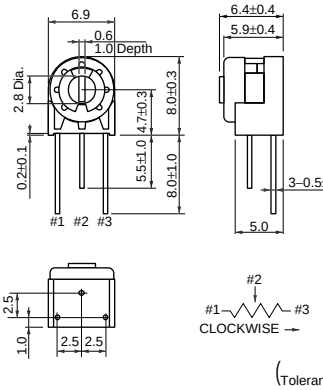


PV32S



PV32T



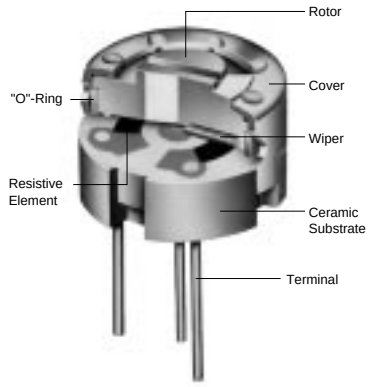
Part Number	Power Rating	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR
PV32□100A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm ±20%	±100ppm
PV32□200A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	20ohm ±20%	±100ppm
PV32□250A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	25ohm ±20%	±100ppm

Continued on the following pa

PV32□201A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	200ohm ±20%	±100ppm
PV32□251A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	250ohm ±20%	±100ppm
PV32□501A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	500ohm ±20%	±100ppm
PV32□102A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	1k ohm ±20%	±100ppm
PV32□202A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	2k ohm ±20%	±100ppm
PV32□252A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	2.5k ohm ±20%	±100ppm
PV32□502A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	5k ohm ±20%	±100ppm
PV32□103A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	10k ohm ±20%	±100ppm
PV32□203A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	20k ohm ±20%	±100ppm
PV32□253A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	25k ohm ±20%	±100ppm
PV32□503A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	50k ohm ±20%	±100ppm
PV32□104A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	100k ohm ±20%	±100ppm
PV32□204A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	200k ohm ±20%	±100ppm
PV32□254A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	250k ohm ±20%	±100ppm
PV32□504A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	500k ohm ±20%	±100ppm
PV32□105A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	1M ohm ±20%	±100ppm
PV32□205A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	2M ohm ±20%	±100ppm
PV32□505A01	0.5W(70°C)	Flow/Soldering Iron	1(230°±5°)	5M ohm ±20%	±100ppm

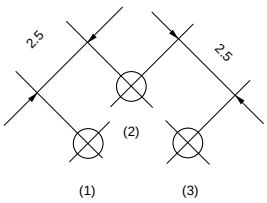
Operating Temperature Range: -55 to 125 °C
The blank column is filled with the code of adjustment direction and lead type (H, P, R, N, S and T).
The order quantity should be an integral multiple of the "Minimum Quantity".

■ Construction



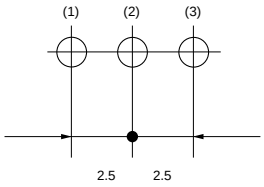
■ Mounting Holes

PV32H



(Tolerance:±0.1 in mm)

PV32R



(Tolerance:±0.1 in mm)

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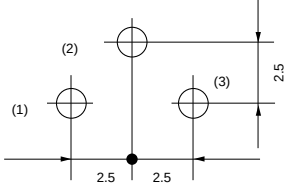
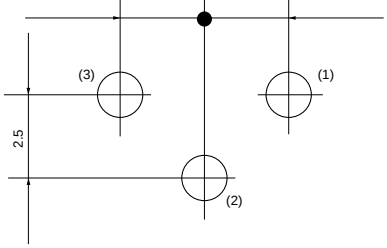
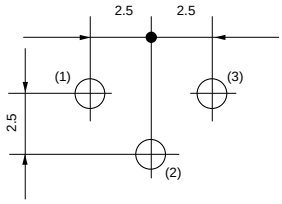




(Tolerance:±0.1 in mm)

PV32T



(Tolerance:±0.1 in mm)

■ Characteristics

Temperature Cycle	ΔTR	±2%
	ΔV.S.S.	±1%
Humidity	ΔTR	±2%
	IR	100Mohm min.
Vibration (20G)	ΔTR	±1%
	ΔV.S.S.	±1%
Shock (100G)	ΔTR	±1%
	ΔV.S.S.	±1%
Temperature Load Life	ΔTR	±2%
	ΔV.S.S.	±2%
Low Temperature Exposure	ΔTR	±2%
	ΔV.S.S.	±1%
High Temperature Exposure	ΔTR	±2%
	ΔV.S.S.	±1%
Rotational Life (200 cycles)	ΔTR	±4%

ΔTR : Total Resistance Change
ΔV.S.S. : Voltage Setting Stability
IR : Insulation Resistance

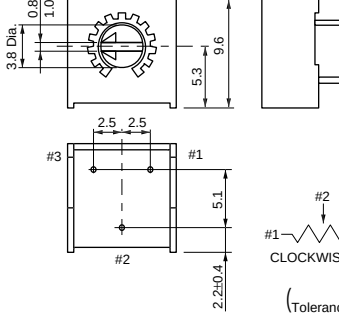
7

1. 5 standard terminal styles
2. Sealed construction protects the interior from dust and liquid, which achieves stable performance.
3. Available for ultrasonic cleaning after soldering
4. Flammability : UL94V-0
5. To be complied with RoHS directive by new Cd free cermet resistive material. Pb free terminals with Sn plating.

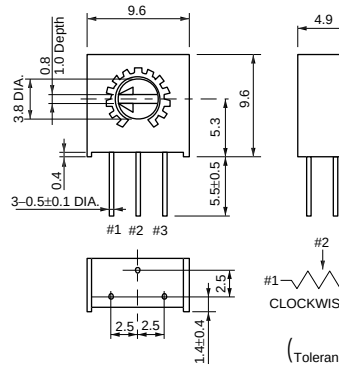
■ Applications

1. HDTVs
2. Professional cameras
3. CATV
4. Printers
5. Sensors
6. Switching power supplies

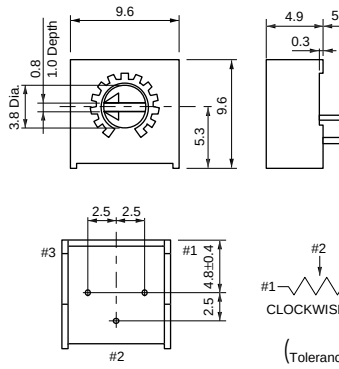
PV34F



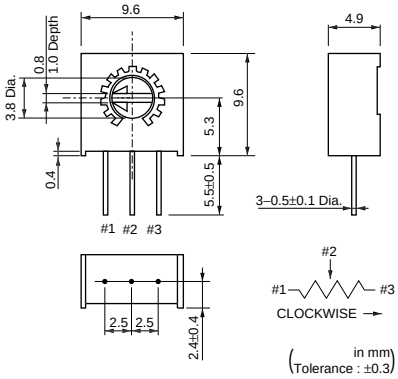
PV34H



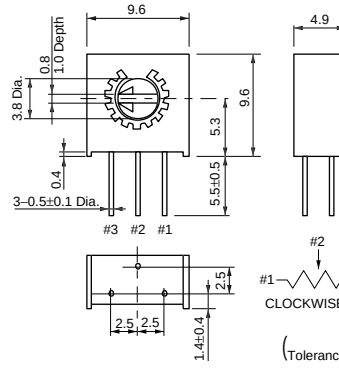
PV34P



PV34W



PV34X



Part Number	Power Rating	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR
PV34□100C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm ±10%	±150ppm
PV34□200C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	20ohm ±10%	±150ppm
PV34□500C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	50ohm ±10%	±150ppm

Continued on the following pa

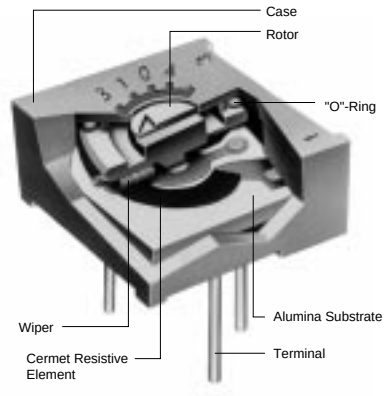
PV34□501C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	500ohm ±10%	±100ppm
PV34□102C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	1k ohm ±10%	±100ppm
PV34□202C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	2k ohm ±10%	±100ppm
PV34□502C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	5k ohm ±10%	±100ppm
PV34□103C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	10k ohm ±10%	±100ppm
PV34□203C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	20k ohm ±10%	±100ppm
PV34□253C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	25k ohm ±10%	±100ppm
PV34□503C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	50k ohm ±10%	±100ppm
PV34□104C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	100k ohm ±10%	±100ppm
PV34□204C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	200k ohm ±10%	±100ppm
PV34□254C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	250k ohm ±10%	±100ppm
PV34□504C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	500k ohm ±10%	±100ppm
PV34□105C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	1M ohm ±10%	±100ppm
PV34□205C01	0.5W(70°C)	Flow/Soldering Iron	1(280°±15°)	2M ohm ±10%	±100ppm

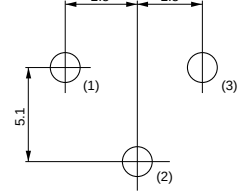
Operating Temperature Range: -55 to 125 °C
The blank column is filled with the code of adjustment direction and lead type (F, H, P, X and W).
The order quantity should be an integral multiple of the "Minimum Quantity".

Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)	Remar
PV34□100A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10 ohm±10%	±100	
PV34□200A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	20 ohm±10%	±100	
PV34□500A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	50 ohm±10%	±100	
PV34□101A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	100 ohm±10%	±100	
PV34□201A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	200 ohm±10%	±100	
PV34□501A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	500 ohm±10%	±100	
PV34□102A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	1k ohm±10%	±100	
PV34□202A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	2k ohm±10%	±100	
PV34□502A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	5k ohm±10%	±100	Non Star
PV34□103A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10k ohm±10%	±100	Produ
PV34□203A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	20k ohm±10%	±100	(Cd inclu
PV34□253A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	25k ohm±10%	±100	
PV34□503A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	50k ohm±10%	±100	
PV34□104A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	100k ohm±10%	±100	
PV34□204A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	200k ohm±10%	±100	
PV34□254A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	250k ohm±10%	±100	
PV34□504A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	500k ohm±10%	±100	
PV34□105A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	1M ohm±10%	±100	
PV34□205A01	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	2M ohm±10%	±100	

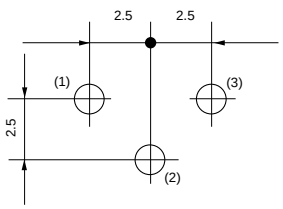
7

■ Construction



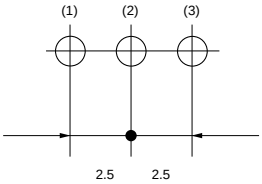


Tolerance:±0.1 in mm



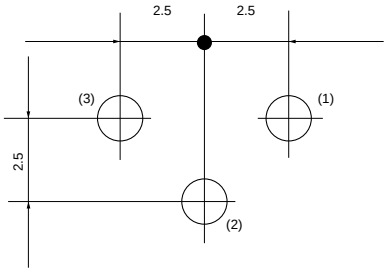
Tolerance:±0.1 in mm

PV34W



Tolerance:±0.1 in mm

PV34X



Tolerance:±0.1 in mm

■ Characteristics

Temperature Cycle	ΔTR	±2%
	ΔV.S.S.	±1%
Humidity	ΔTR	±2%
	IR	100Mohm min.
Vibration (20G)	ΔTR	±1%
	ΔV.S.S.	±1%
Shock (100G)	ΔTR	±1%
	ΔV.S.S.	±1%
Temperature Load Life	ΔTR	±2%
	ΔV.S.S.	±2%
Low Temperature Exposure	ΔTR	±1%
	ΔV.S.S.	±1%
High Temperature Exposure	ΔTR	±2%
	ΔV.S.S.	±1%
Rotational Life (200 cycles)	ΔTR	R≦100kohm ... ±3%
		R>100kohm ... ±5%

ΔTR : Total Resistance Change
ΔV.S.S. : Voltage Setting Stability
IR : Insulation Resistance
R : Standard Total Resistance

1. Store in temperatures of -10 to +40 deg. C and relative humidity of 30-85%RH.
2. Do not store in or near corrosive gases.
3. Use within six months after delivery.
4. Open the package just before using.
5. Do not store under direct sunlight.
6. If you use the trimmer potentiometer in an environment other than listed below, please consult with a Murata factory representative prior to using.
   The trimmer potentiometer should not be used under the following environmental conditions:
   (1) Corrosive gaseous atmosphere
   (Ex. Chlorine gas, Hydrogen sulfide gas, Ammonia gas, Sulfuric acid gas, Nitric oxide gas, etc.)
   (2) In liquid
   (Ex. Oil, Medical liquid, Organic solvent, etc.)
   (3) Dusty / dirty atmosphere
   (4) Direct sunlight
   (5) Static voltage nor electric/magnetic fields
   (6) Direct sea breeze
   (7) Other variations of the above

■ Notice (Rating)

1. When using with partial load (rheostat), minimize the power depending on the resistance value.
2. The maximum input voltage to a trimmer potentiometer should not exceed (P.R)^1/2 or the maximum operating voltage, whichever is smaller.
3. The maximum input current to a trimmer potentiometer should not exceed (P/R)^1/2 or the allowable wiper current, whichever is smaller.

■ Notice (Soldering and Mounting)

1. Soldering
   (1) Standard soldering condition
      (a) Flow soldering :
         >Pre-heating temp. 80-100 deg. C
         >Soldering temp. 260 deg. C max.
         >Soldering time 3 sec. max.
      (b) Soldering iron :
         >Temperature of tip 300 deg. C max.
         >Soldering time 3 sec. max.
         >Wattage of iron 40W max.
      Before using other soldering conditions than those listed above, please consult with Murata factory representative prior to using. If the soldering conditions are not suitable, e.g., excessive time and/or excessive temperature, the trimmer potentiometer may deviate from the specified characteristics.
   (2) To minimize mechanical stress when adjusting, the trimmer potentiometer should be mounted onto PCB without gap.
   (3) The soldering iron should not come in contact with the case of the trimmer potentiometer. If such contact does occur, the trimmer potentiometer may be damaged.
2. Mounting
   (1) Use PCB hole to meet the pin of the trimmer potentiometer. If the trimmer potentiometer installs into insufficient PCB hole, the trimmer potentimeter may be damaged by mechanical stress.
   (2) Do not apply excessive force (preferably 9.8N (Ref.; 1kgf) max.), when the trimmer potentiometer is mounted to the PCB.
3. Cleaning
   (1) Isopropyl-alcohol and Ethyl-alcohol are applicable solvents for cleaning. If you use any other types of solvents, please consult with a Murata factory representative prior to using.
   (2) The total cleaning time by cold dipping, vapor and ultrasonic washing (conditions as below) method should be less than 3 minutes.
   (3) For ultra-sonic cleaning, the available condition is as follows.
      >Power: 600W (67 liter) max.
      >Frequency: 28kHz
      >Temperature: Ambient temperature
   Due to the ultra-sonic cleaning equipment's peculiar self-resonance point and that the cleaning compatibility usually depends on the jig construction and/or the cleaning condition such as the depth of immersion, please check the cleaning equipment to determine the suitable conditions.
   If the trimmer potentiometer is cleaned by other conditions, the trimmer potentiometer may be damaged.

1. Use suitable screwdrivers that fit comfortably in driver slot. We recommend the screwdrivers below.
   * Recommended screwdriver for manual adjustment
     <PVC6 series>
      VESSEL MFG. : NO.9000+0x30
        (Murata P/N : KMDR150)
      TORAY INDUSTRIES, INC. : SA-2225
        (Murata P/N : KMDR070)
     <PV32/34 series>
      ENGINEER INC. : DA-40
        (Murata P/N : KMDR180)
   * Recommended screwdriver bit for automatic adjustment
     <PVC6 series>
      VESSEL MFG. : NO.CA-10
        (Murata P/N : KMBT090)
      TORAY INDUSTRIES, INC. : JB-2225
        (Murata P/N : KMBT070)
   We can supply the screwdrivers avobe.

■ Notice (Other)

1. Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Murata cannot guarantee trimmer potentiometer integrity when used under conditions other than those specified in this document.

If you place an order, please specify the Murata P/N.

2. Don't apply more than 9.8N (Ref.; 1kgf) of twist and stress after mounting onto PCB to prevent contact intermittence. If excessive force is applied, the trimmer potentiometer may not function.
3. When adjusting with an adjustment tool, the applied force to the adjustment screw should not exceed 4.9N (Ref.; 500gf). If excessive force is applied, the trimmer potentiometer may not function due to damage.
4. The rotational torque at the position of the adjustment range should not exceed the stop strength.
5. When using a lock paint to fix slot position, please use adhesive resin without chlorine or sulfur (Three-bond "1401 series").

for variable resistors, non-wirewound) and MIL-STD-202 (Test methods for electronic and electrical component parts).

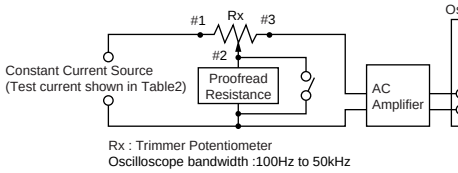
<table>
<tr><th>No.</th><th>Item</th><th>Test Methods</th></tr>
<tr><td>1</td><td>Total Resistance</td><td>Measure total resistance between the resistance element and terminals (#1 and #3) with the contact arm positi against a stop. The positioning of the contact arm and terminal should be the same for subsequent total resista measurements on the same device. Use the test voltage specified in Table 1 for total resistance measurement This voltage should be used for all subsequent total resistance measurements.
<table>
<tr><th>Total Resistance, Nominal (ohm)</th><th>Maximum Test Voltage (V)</th></tr>
<tr><td>10≦R≦100</td><td>1.0</td></tr>
<tr><td>100<R≦1k</td><td>3.0</td></tr>
<tr><td>1k<R≦10k</td><td>10.0</td></tr>
<tr><td>10k<R≦100k</td><td>30.0</td></tr>
<tr><td>100k<R</td><td>100.0</td></tr>
</table>
Table 1: Total resistance test voltage</td></tr>
<tr><td>2</td><td>Residual Resistance</td><td>Position the contact arm at the extreme counterclockwise limit of mechanical travel and measure the resistance between the contact arm and the corresponding end terminal. Then, position the contact arm at the extreme cl wise limit of mechanical travel and measure the resistance between the contact arm and the corresponding en minal. During this test, take suitable precautions to ensure that the rated current of the resistance element is no exceeded.</td></tr>
<tr><td>3</td><td>Contact Resistance Variation</td><td>Contact resistance variation should be measured with the measuring circuit shown in Figure 1, or its equivalen adjustment rotor (screw) should be rotated in both directions through 90% of the actual effective-electrical rotat angle (number of turns) for a total of 6 cycles. Only the last 3 cycles should count in determining whether or no contact resistance variation is observed at least twice in the same location, exclusive of the roll-on or roll-off po where the contact arm moves from the termination, on or off, the resistance element. The rate of rotation of the adjustment rotor (screw) should be such that the adjustment rotor (screw) completes 1 cycle for 5 seconds min to 2 minutes maximum. The test current used should follow the value given in Table 2 unless otherwise limited power rating.
<table>
<tr><th>Standard Total Resistance R (ohm)</th><th>Test Current</th></tr>
<tr><td>R≦100</td><td>20mA</td></tr>
<tr><td>100<R<500</td><td>10mA</td></tr>
<tr><td>500≦R<1k</td><td>4mA</td></tr>
<tr><td>1k≦R<2k</td><td>2mA</td></tr>
<tr><td>2k≦R<50k</td><td>1mA</td></tr>
<tr><td>50k≦R<200k</td><td>200μA</td></tr>
<tr><td>200k≦R<1M</td><td>100μA</td></tr>
<tr><td>1M≦R<2M</td><td>50μA</td></tr>
<tr><td>2M≦R</td><td>30μA</td></tr>
</table>
Table 2: Test current for CRV


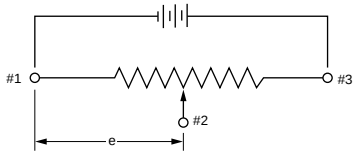
Figure 1: CRV measuring circuit</td></tr>
<tr><td>4</td><td>Temperature Coefficient of Resistance</td><td>The trimmer potentiometer should be subjected to each of the following temperatures (see Table 3) for 30-45 m utes. Temperature coefficient of resistance should be applied to the following formula.
$$TCR=\frac{R_2-R_1}{R_1(T_2-T_1)}\times 10^6\ (ppm/°C)$$
T_1 : Reference temperature in degrees celsius
T_2 : Test temperature in degrees celsius
R_1 : Resistance at reference temperature ohm
R_2 : Resistance at test temperature in ohm
<table>
<tr><th>Sequence</th><th>1*</th><th>2</th><th>3</th><th>4*</th><th>5</th><th>6</th></tr>
<tr><td>Temperature (°C)</td><td>+25</td><td>-15</td><td>Min. operating Temperature</td><td>+25</td><td>+65</td><td>Max. operating Temperature</td></tr>
</table>
Note*: Reference temperature
Table 3: Test temperatures</td></tr>
<tr><td>5</td><td>Voltage Setting Stability</td><td>The wiper should be set at approximately 40% of the actual effective-electrical rotational angle (number of turn adequate DC test potential should be applied between terminal #1 and terminal #3. The voltage between termi and terminal #3, and the voltage between terminal #1 and terminal #2, should be measured and applied to the following formula.
Voltage setting stability= $\left(\frac{e'}{E}-\frac{e}{E}\right)\times 100\ (\%)$
e : Before test
(The voltage between terminal #1 and terminal #2)
e': After test
(The voltage between terminal #1 and terminal #2)
E: The voltage between terminal #1 and terminal #3


Figure 2</td></tr>
</table>

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6	Temperature Cycle	The trimmer potentiometer should be subjected to Table 4 temperature for 5 cycles. The trimmer potentiometer should be removed from the chamber, and maintained at a temperature of 25±5°C for 1~2 hours.

Sequence		1	2	3	4
Temp. (°C)	PV□□ series	-55±3	+25±2	+125±3	+25±2
	PV22 series			+150±3	
	PVF2 series	-25±3		+60±3	
Time (min.)		30	5 max.	30	5 max.

Table 4: One cycle of temperature cycle.

7	Humidity	1) PVC6, PV12, PV32, PV34 PVM4A□□□D01 series The trimmer potentiometer should be placed in a chamber at a temperature of 40±2°C and a humidity of 90~95 without loading for 250±8 hours (500±12 hours for PVM4A□□□D01 series). The trimmer potentiometer should removed from the chamber, and maintained at a temperature of 25±5°C for 5±1/6 hours. 2) PVF2 series The trimmer potentiometer should be placed in a chamber at 60±2°C and 90~95% without loading for 1000±12 hours. The trimmer potentiometer should be removed from the chamber, and maintained at a temperature of 2 for 5±1/6 hours 2) PVG3, PVG5, PV01, PV22, PV23, PV36, PV37 series The trimmer potentiometer should be subjected Figure-3 the programmed humidity environment for 10 cycle. The mer potentiometer should be removed from the chamber, and maintained at a temperature of 25±5°C for 1.5±1/2 hours.

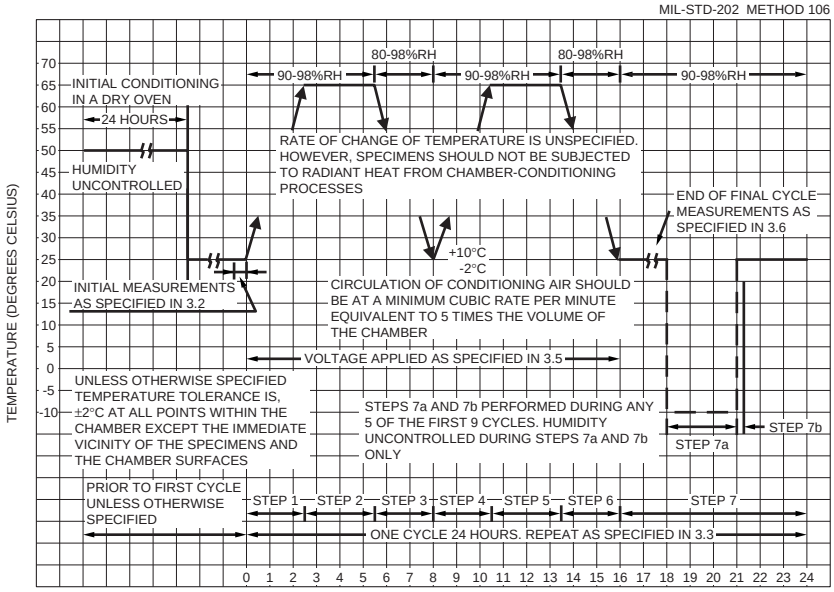

Figure 3

8	Vibration	1) PV□□ series The trimmer potentiometer should be vibrated throughout the frequency range at the 20G level. A complete fre cy range, 10Hz to 2000Hz and back, should be made within 15 minutes for a total of 4 sweeps in each of the th axis direction for a total of 12 sweeps. 2) PVF2 series The trimmer potentiometer should be subjected to vibration at 0.3 inch amplitude. The frequency should be var uniformly between the approximate limits of 10Hz and 55Hz. This motion should be applied for period of 2 hour each of 3 mutually perpendicular directions (total of 6 hours).
9	Shock	1) PV□□ series The trimmer potentiometer should be shocked at the 100G (50G for PV22 and PV23 series) level and should b subjected to 4 shocks in each of the three axis directions for a total of 12 shocks. 2) PVM4A□□□D01 series The trimmer potentiometer should be shocked at the 100G level and should be subjected to 3 shocks in each o six axis directions for a total of 18 shocks.
10	Temperature Road Life	Full rated continuous working voltage not exceeding the maximum rated voltage should be applied intermittently between terminal #1 and terminal #3 of the trimmer potentiometer, 1.5 hours on and 0.5 hours off, for a total of 1000±12 hours, at a temperature of 70±2°C (85±2°C for PV01 and PV37 series, 50±2°C for PVF2 series). The t mer potentiometer should be removed from the chamber, and maintained at a temperature of 25±5°C for 1 to 2
11	High Temperature Exposure (Except for PVF2)	The trimmer potentiometer should be placed in a chamber at a temperature of 125±3°C (150±3°C for PV22 ser 250±8 hours without loading. The trimmer potentiometer should be removed from the chamber, and maintained temperature of 25±5°C for 1 to 2 hours.
12	Low Temperature Exposure (Except for PVF2 and PVM4A□□□D01)	The trimmer potentiometer should be placed in a chamber at a temperature of -55±3°C for 1 hours without load Full rated continuous working voltage not exceeding the maximum rated voltage should be applied for 45 minu The trimmer potentiometer should be removed from the chamber, and maintained at a temperature of 25±5°C approximately 24 hours.

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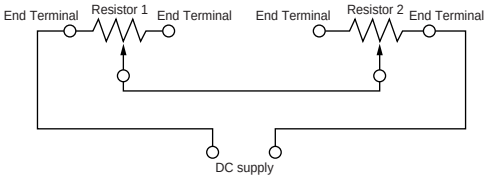
13	Low Temperature Operation (Only for PVF2 and PVM4A□□□D01)	The trimmer potentiometer should be placed in a chamber at a temperature of -25±3°C (-55±3°C for PVM4A□□ D01 series) 48±4 hours without loading. The trimmer potentiometer should be removed from the chamber, and tained at a temperature of 25±5°C for 1-2 hours
14	Rotational Life	1)PV□□ series Full rated continuous working voltage not exceeding the maximum rated voltage should be applied with the circ shown in the figure. The adjustment rotor (screw) should be continuously cycled through not less than 90% of e tive-electrical rotational angle (number of turns), at the rate of 1 cycle for 5 seconds minimum to 2.5 minutes m mum for total of 200 cycles.  Figure 4 2) PVG3, PVG5 series The adjustment rotor (screw) should be continuously cycled though not less than 90% of effective-electrical rot al angle (number of turns), at the rate of 1 cycle for 5 seconds minimum to 2.5 minutes maximum for a total of 5 (100 for PVG5) cycles, without loading. 3) PVF2, PVM4A□□□D01 series The wiper should be rotated over 90% of the effective rotational angle without loading at a speed of 10 cycles p minute, for 100 cycles continuously.