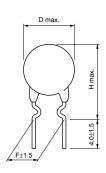
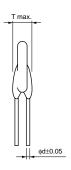
PTC (POSISTOR®) for Circuit Protection

16V/30V/140V Series







(in mm)

	Max. Voltage	Max. Voltage	Non-operating	Non-operating	Operating	Max.	Resistance	Curie	Body	Thikness	Lead	Lead	Height
Part Number	-40°C to-30°C (VDC)	-30°C to+105°C (VDC)	Current at +85°C (mA)	Current at +105°C (mA)		Current (A)	at 25°C (ohm)		Diameter (D) (mm)		Space (F)	Diameter (phi d)(mm)	(H) (mm)
PTGL4SAS100K2N51A0	16	30	92	65	261	1.5	10 ±10%	130 (AS)	4.5	3.5	5.0	0.5	9.5
PTGL4SAS100K2B51A0	16	30	127	89	359	2.0	10 ±10%	130 (AS)	4.5	3.5	5.0	0.6	9.5
PTGL5SAS3R9K2B51A0	16	30	204	143	576	3.5	3.9 ±10%	130 (AS)	5.5	3.5	5.0	0.6	10.5
PTGL7SAS2R7K2B51A0	16	30	255	179	720	4.5	2.7 ±10%	130 (AS)	7.3	3.5	5.0	0.6	12.3
PTGL7SAS1R8K2B51A0	16	30	319	223	902	5.0	1.8 ±10%	130 (AS)	7.3	3.5	5.0	0.6	12.3
PTGL9SAS1R2K2B51A0	16	30	422	296	1193	6.0	1.2 ±10%	130 (AS)	9.3	3.5	5.0	0.6	14.3
PTGLCSAS0R8K2B51A0	16	30	520	364	1470	7.0	0.8 ±10%	130 (AS)	11.5	3.5	5.0	0.6	16.5
PTGL4SAS100K3B51A0	16	51	128	89	361	1.0	10 ±10%	130 (AS)	4.5	3.5	5.0	0.6	9.5
PTGL5SAS6R8K3B51A0	16	51	149	105	422	1.5	6.8 ±10%	130 (AS)	5.5	3.5	5.0	0.6	10.5
PTGL7SAS3R3K3B51A0	16	51	233	163	659	3.0	3.3 ±10%	130 (AS)	7.3	3.5	5.0	0.6	12.3
PTGL9SAS2R2K3B51A0	16	51	313	219	885	4.0	2.2 ±10%	130 (AS)	9.3	3.5	5.0	0.6	14.3
PTGLCSAS1R2K3B51A0	16	51	449	315	1270	5.0	1.2 ±10%	130 (AS)	11.5	3.5	5.0	0.6	16.5
PTGL4SAS220K4N51A0	30	60	67	47	190	1.0	22 ±10%	130 (AS)	4.5	3.5	5.0	0.5	9.5
PTGL4SAS220K4B51A0	30	60	87	61	246	1.0	22 ±10%	130 (AS)	4.5	3.5	5.0	0.6	9.5
PTGL5SAS100K4B51A0	30	60	129	90	364	1.5	10 ±10%	130 (AS)	5.5	3.5	5.0	0.6	10.5
PTGL7SAS5R6K4N51A0	30	60	142	99	400	2.2	5.6 ±10%	130 (AS)	7.3	3.5	5.0	0.5	12.3
PTGL7SAS5R6K4B51A0	30	60	174	122	492	3.0	5.6 ±10%	130 (AS)	7.3	3.5	5.0	0.6	12.3
PTGL9SAS3R3K4B51A0	30	60	253	177	714	4.0	3.3 ±10%	130 (AS)	9.3	3.5	5.0	0.6	14.3
PTGLCSAS2R2K4B51A0	30	60	334	234	942	5.0	2.2 ±10%	130 (AS)	11.5	3.5	5.0	0.6	16.5
PTGL4SAS560K6B51A0	140	140	56	39	159	0.5	56 ±10%	130 (AS)	5.5	4.5	5.0	0.6	10.5
PTGL5SAS270K6B51A0	140	140	80	56	227	1.0	27 ±10%	130 (AS)	5.5	4.5	5.0	0.6	10.5
PTGL7SAS150K6B51A0	140	140	112	79	317	1.5	15 ±10%	130 (AS)	7.3	4.5	5.0	0.6	12.3
PTGL9SAS120K6B51A0	140	140	146	102	413	2.0	12 ±10%	130 (AS)	9.3	4.5	5.0	0.6	14.3
PTGL9SAS7R6K6B51A0	140	140	172	121	486	2.2	7.6 ±10%	130 (AS)	9.3	4.5	5.0	0.6	14.3
PTGLCSAS4R7K6B51A0	140	140	236	165	666	3.5	4.7 ±10%	130 (AS)	11.5	4.5	5.0	0.6	16.5



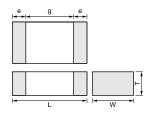
Resistors/Thermistors

PTC (POSISTOR®) for Circuit Protection

Chip Type





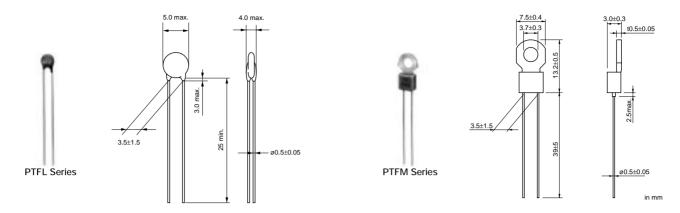


Part Number		Dimensions (mm)							
Part Number	L	W	Т	е	g				
PRG18_RB	1.6±0.15	0.8±0.15	0.8±0.15	0.1 to 0.6	-				
PRG21_RA	2.0±0.2	1.25±0.2	0.9±0.2	0.2 min.	0.5 min.				
PRG21 RK	2.0±0.2	1.25±0.2	1.25±0.2	0.2 min.	0.5 min.				

Part Number	Max. Voltage (VDC)	Non-operating Current at +105°C (mA)	Max. Current (A)	Resistance at 25°C (ohm)	Operating Temperature Range (°C)
PRG21AR220MS1RK	16	25	0.9	22 ±20%	-40 to +105
PRG21AR420MS1RA	20	10	0.6	42 ±20%	-40 to +105

PTC (POSISTOR®) for Overheat Sensing

Lead Type



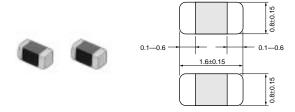
Part Number	Max. Voltage (V)	Curie Point (°C)	Sensing Temp. (TS) (°C)	Resistance Value at 25°C (ohm)	Resistance Value (Sensing Temp10°C)	Resistance Value at Sensing Temp. (TS°C)	
PTF□04BH471Q2N34B0	16	40 (BH)	60	100 max.	330ohm max.	470ohm min.	
PTF□04BG471Q2N34B0	16	50 (BG)	70	100 max.	330ohm max.	470ohm min.	
PTF□04BF471Q2N34B0	16	60 (BF)	80	100 max.	330ohm max.	470ohm min.	
PTF□04BE471Q2N34B0	16	70 (BE)	90	100 max.	330ohm max.	470ohm min.	
PTF□04BD471Q2N34B0	16	80 (BD)	100	100 max.	330ohm max.	470ohm min.	
PTF□04BC471Q2N34B0	16	90 (BC)	110	100 max.	330ohm max.	470ohm min.	
PTF□04BB471Q2N34B0	16	100 (BB)	120	100 max.	330ohm max.	470ohm min.	
PTF□04BH222Q2N34B0	16	40 (BH)	60	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BG222Q2N34B0	16	50 (BG)	70	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BF222Q2N34B0	16	60 (BF)	80	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BE222Q2N34B0	16	70 (BE)	90	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BD222Q2N34B0	16	80 (BD)	100	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BC222Q2N34B0	16	90 (BC)	110	330 max.	1.5k ohm max.	2.2k ohm min.	
PTF□04BB222Q2N34B0	16	100 (BB)	120	330 max.	1.5k ohm max.	2.2k ohm min.	

A blank is filled with type codes. (L: Lead type, M: with Lug-terminal)

Operating temperature: Lower temperature is -30 deg. C. Upper temperature is 10 deg. C. higher than sensing temperature (Ts).

PTC (POSISTOR®) for Overheat Sensing

Chip Type



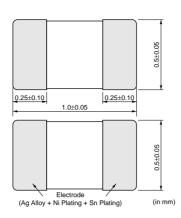
(in mm)

Part Number	Sensing Temperature (at 4.7k ohm) (°C)	Maximum Voltage (V)	Resistance (at 25 degree) (ohm)	Operating Temperature Range (°C)
PRF18BG471QS2RB	65 ±5	32	470 ±50%	-40 to 150
PRF18BF471QS2RB	75 ±5	32	470 ±50%	-40 to 150
PRF18BE471QS2RB	85 ±5	32	470 ±50%	-40 to 150
PRF18BD471QS2RB	95 ±5	32	470 ±50%	-40 to 150
PRF18BC471QS2RB	105 ±5	32	470 ±50%	-40 to 150
PRF18BB471QS2RB	115 ±5	32	470 ±50%	-40 to 150
PRF18BA471QS2RB	125 ±5	32	470 ±50%	-40 to 150
PRF18AR471QS2RB	135 ±5	32	470 ±50%	-40 to 150
PRF18AS471QS2RB	145 ±5	32	470 ±50%	-40 to 150

NTC for Temperature Compensation

0402(1005) Size





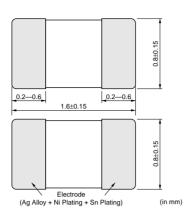
Part Number	Resistance (25°C)	B-Constant (25-50°C) (K)	Max. Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)	Operating Temperature Range (°C)
NCP15XC220□0SRC	22ohm	3100 ±3%	6.70	100	1	-40 to 125
NCP15XC330□0SRC	33ohm	3100 ±3%	5.50	100	1	-40 to 125
NCP15XC470□0SRC	47ohm	3100 ±3%	4.60	100	1	-40 to 125
NCP15XC680□0SRC	68ohm	3100 ±3%	3.80	100	1	-40 to 125
NCP15XF101□0SRC	100ohm	3250 ±3%	3.10	100	1	-40 to 125
NCP15XF151□0SRC	150ohm	3250 ±3%	2.50	100	1	-40 to 125
NCP15XM221□0SRC	220ohm	3500 ±3%	2.10	100	1	-40 to 125
NCP15XM331□0SRC	330ohm	3500 ±3%	1.70	100	1	-40 to 125
NCP15XQ471□0SRC	470ohm	3650 ±3%	1.40	100	1	-40 to 125
NCP15XQ681□0SRC	680ohm	3650 ±3%	1.20	100	1	-40 to 125
NCP15XQ102□0SRC	1.0k ohm	3650 ±3%	1.00	100	1	-40 to 125
NCP15XW152□0SRC	1.5k ohm	3950 ±3%	0.81	100	1	-40 to 125
NCP15XW222□0SRC	2.2k ohm	3950 ±3%	0.67	100	1	-40 to 125
NCP15XW332□0SRC	3.3k ohm	3950 ±3%	0.55	100	1	-40 to 125
NCP15XM472□0SRC	4.7k ohm	3500 ±3%	0.46	100	1	-40 to 125
NCP15XW682□0SRC	6.8k ohm	3950 ±3%	0.38	100	1	-40 to 125
NCP15XH103□0SRC	10k ohm	3380 ±3%	0.31	100	1	-40 to 125
NCP15XW153□0SRC	15k ohm	3950 ±3%	0.25	100	1	-40 to 125
NCP15XW223□0SRC	22k ohm	3950 ±3%	0.21	100	1	-40 to 125
NCP15WB333□0SRC	33k ohm	4050 ±3%	0.17	100	1	-40 to 125
NCP15WB473□0SRC	47k ohm	4050 ±3%	0.14	100	1	-40 to 125
NCP15WD683□0SRC	68k ohm	4150 ±3%	0.12	100	1	-40 to 125
NCP15WF104□0SRC	100k ohm	4250 ±3%	0.10	100	1	-40 to 125
NCP15WM154□0SRC	150k ohm	4500 ±3%	0.08	100	1	-40 to 125
NCP15WM224□0SRC	220k ohm	4500 ±3%	0.06	100	1	-40 to 125
NCP15WM474□0SRC	470k ohm	4500 ±3%	0.04	100	1	-40 to 125

A blank column is filled with resistance tolerance codes. (J: $\pm 5\%$, K: $\pm 10\%$) Tolerance ±1% NCP15XH103F0SRC is also available for 10k ohm type.

NTC for Temperature Compensation

0603(1608) Size





Part Number	Resistance (25°C)	B-Constant (25-50°C) (K)	Max. Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)	Operating Temperature Range (°C)
NCP18XF101□0SRB	100ohm	3250 ±3%	3.10	100	1	-40 to 125
NCP18XF151□0SRB	150ohm	3250 ±3%	2.50	100	1	-40 to 125
NCP18XM221□0SRB	220ohm	3500 ±3%	2.10	100	1	-40 to 125
NCP18XM331□0SRB	330ohm	3500 ±3%	1.70	100	1	-40 to 125
NCP18XQ471□0SRB	470ohm	3650 ±3%	1.40	100	1	-40 to 125
NCP18XQ681□0SRB	680ohm	3650 ±3%	1.2	100	1	-40 to 125
NCP18XQ102□0SRB	1.0k ohm	3650 ±3%	1.00	100	1	-40 to 125
NCP18XW152□0SRB	1.5k ohm	3950 ±3%	0.81	100	1	-40 to 125
NCP18XW222□0SRB	2.2k ohm	3950 ±3%	0.67	100	1	-40 to 125
NCP18XW332□0SRB	3.3k ohm	3950 ±3%	0.55	100	1	-40 to 125
NCP18XM472□0SRB	4.7k ohm	3500 ±3%	0.46	100	1	-40 to 125
NCP18XW682□0SRB	6.8k ohm	3950 ±3%	0.38	100	1	-40 to 125
NCP18XH103□0SRB	10k ohm	3380 ±3%	0.31	100	1	-40 to 125
NCP18XW153□0SRB	15k ohm	3950 ±3%	0.25	100	1	-40 to 125
NCP18XW223□0SRB	22.0k ohm	3950 ±3%	0.21	100	1	-40 to 125
NCP18WB333□0SRB	33k ohm	4050 ±3%	0.17	100	1	-40 to 125
NCP18WB473□0SRB	47k ohm	4050 ±3%	0.14	100	1	-40 to 125
NCP18WD683□0SRB	68k ohm	4150 ±3%	0.12	100	1	-40 to 125
NCP18WF104□0SRB	100k ohm	4250 ±3%	0.10	100	1	-40 to 125
NCP18WM154□0SRB	150k ohm	4500 ±3%	0.08	100	1	-40 to 125
NCP18WM224□0SRB	220k ohm	4500 ±3%	0.06	100	1	-40 to 125
NCP18WM474□0SRB	470k ohm	4500 ±3%	0.04	100	1	-40 to 125

Both flow and reflow soldering methods can be employed.

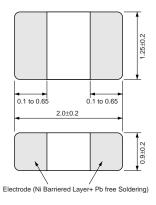
A blank column is filled with resistance tolerance codes. (J: $\pm 5\%$, K: $\pm 10\%$)

Tolerance $\pm 1\%$ NCP18XH103F0SRB is also available for 10k ohm type.

NTC for Temperature Compensation

0805(2012) Size





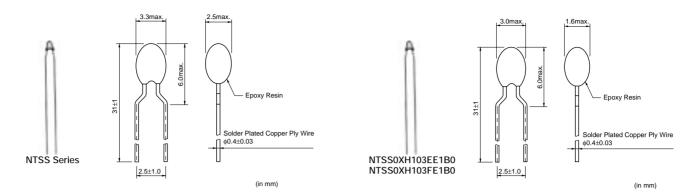
(in mm)

Part Number	Resistance at 25°C	B-Constant (25/50°C) (K)	Permissive Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)	Operating Temperature Range (°C)
NCM21XQ103□0SRA	10kohm	3650	0.44	200	2.0	-40 to +125
NCM21XW223□0SRA	22kohm	3950	0.30	200	2.0	-40 to +125
NCM21WB473□0SRA	47kohm	4050	0.20	200	2.0	-40 to +125
NCM21WF104□0SRA	100kohm	4250	0.14	200	2.0	-40 to +125

A blank column is filled with resistance tolerance codes. (J:±5%, K:±10%)

NTC for Temperature Sensor

Resin Coated Radial Lead Type



Part Number	Resistance (25°C) (k ohm)	B-Constant (25-50°C) (K)	Max. Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)	Thermal Time Constant(s)	Operating Temperature Range (°C)
NTSS0XM202□E1B0	2.0	3500 ±1%	1.05	21	2.1	less than7	-40 to 125
NTSS0XR502□E1B0	5.0	3700 ±1%	0.68	21	2.1	less than7	-40 to 125
NTSS0XH103□E1B0	10	3380 ±1%	0.38	15	1.5	less than7	-40 to 125
NTSS0XV103□E1B0	10	3900 ±1%	0.46	21	2.1	less than7	-40 to 125
NTSS0WB203□E1B0	20	4050 ±1%	0.31	21	2.1	less than7	-40 to 125
NTSS0WC303□E1B0	30	4100 ±1%	0.26	21	2.1	less than7	-40 to 125
NTSS0WD503□E1B0	50	4150 ±1%	0.20	21	2.1	less than7	-40 to 125
NTSS0WF104□E1B0	100	4250 ±1%	0.14	21	2.1	less than7	-40 to 125

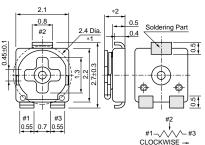
A blank column is filled with resistance tolerance codes. (F: $\pm 1\%$, E: $\pm 3\%$)

Taping type of part numbers with "A0" is available.

SMD Open Type 2mm Size



PVZ2A Series

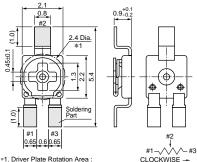


Driver Plate Rotation Area :

Please do not place any components more than 0.7mm in height within this area
*2 PVZ2A : 0.9±0.1
PVZ2A_A04 : 0.8±0.05



PVZ2K Series



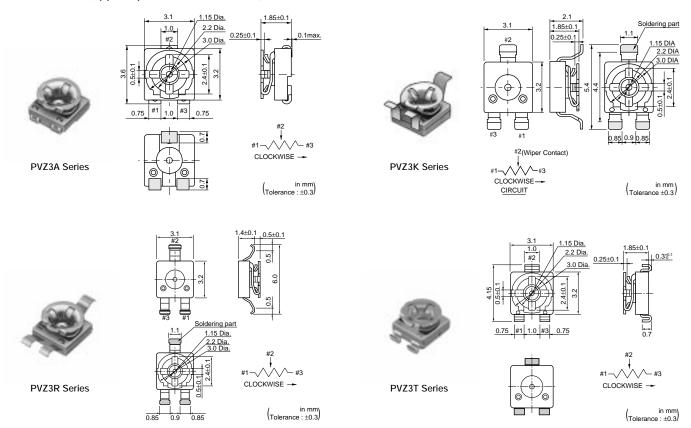
*1. Driver Plate Rotation Area : Please do not place any components more than 0.7mm in height within this

	#1-\\\\-#3 CLOCKWISE -	
area.	(n mm) Tolerance : ±0.2	

Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVZ2A	0.1(50°C)	Reflow	1(240°±10°)	500ohm to 1M ohm ±30%	±500
PVZ2K	0.1(50°C)	Reflow	1(240°±10°)	500ohm to 1M ohm ±30%	±500

SMD Open Type 3mm Size

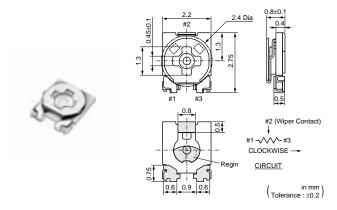
PVZ3 Series (Applied product to ELV. RoHS)



Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVZ3A	0.1(50°C)	Reflow	1(230°±10°)	200ohm to 2M ohm ±30%	±500
PVZ3K	0.1(50°C)	Reflow	1(230°±10°)	200ohm to 2M ohm ±30%	±500
PVZ3R	0.1(50°C)	Reflow	1(230°±10°)	200ohm to 2M ohm ±30%	±500
PVZ3T	0.1(50°C)	Reflow	1(230°±10°)	200ohm to 2M ohm ±30%	±500

SMD Open Type 2mm Size

PVA2 Series



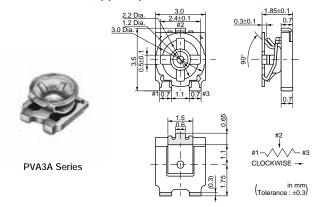
Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVA2A	0.1(70°C)	Reflow/Soldering Iron	1(260°±10°)	100ohm to 2.2M ohm ±25%	±250

Operating Temperature : -55 to +125°C

The order quantity should be an integral multiple of the "Minimum Quantity" shown in the beginning of this catalog.

SMD Open Type 3mm Size

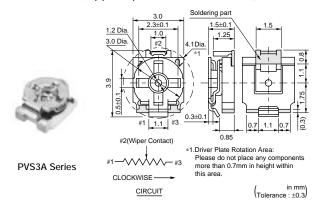
PVA3A Series (Applied product to ELV. RoHS)



Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVA3A	0.1(70°C)	Flow/Reflow	1(270°±10°)	100ohm to 2M ohm ±25%	±250

SMD Open Type 3mm Size

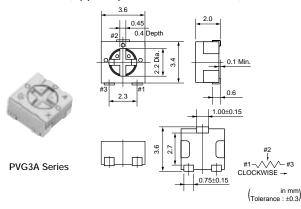
PVS3A Series (Applied product to ELV. RoHS)

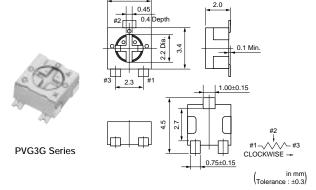


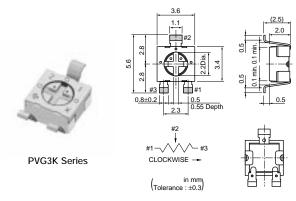
Part Numb	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVS3A	0.1(70°C)	Reflow	1(270°±10°)	100ohm to 2M ohm ±25%	±250

SMD Sealed Type 3mm Size

PVG3 Series (Applied product to ELV. RoHS)





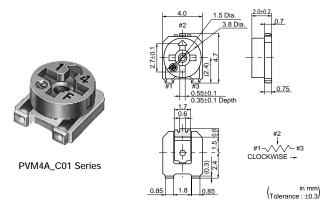


Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVG3A□□□C	0.25(70°C)	Reflow	1(210°±10°)	10ohm to 2M ohm ±20%	±150
PVG3G□□□C	0.25(70°C)	Reflow	1(210°±10°)	10ohm to 2M ohm ±20%	±150
PVG3K□□□C	0.25(70°C)	Reflow	1(210°±10°)	10ohm to 2M ohm ±20%	±150

Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

SMD Sealed Type 4mm Size

PVM4 Series (Applied product to ELV. RoHS)



Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVM4A□□□C01	0.1(70°C)	Flow/Reflow	1(240°±10°)	100ohm to 2M ohm ±25%	±250

Operating Temperature Range: -55 to 125 °C

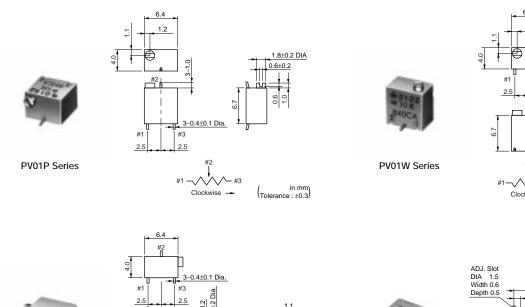
SMD Sealed Type Multi-turns

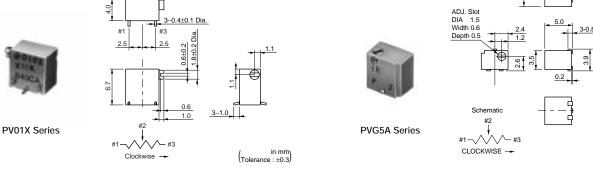
1.8±0.2 Dia. 0.6±0.2

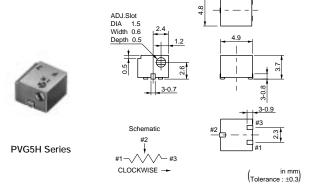
(n mm) Tolerance : ±0.3)

(n mm) Tolerance : ±0.3

PV01/PVG5 Series (Applied product to ELV. RoHS)





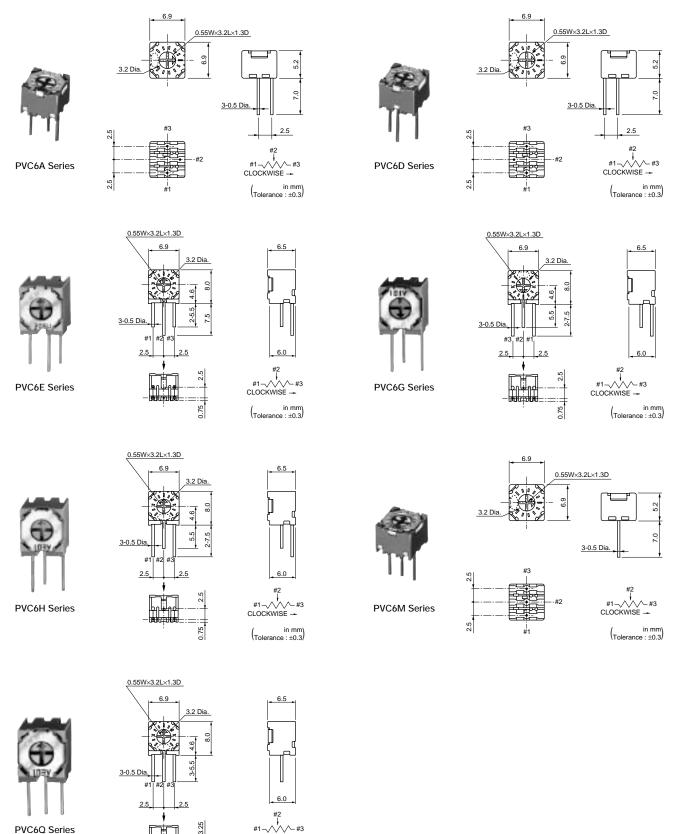


Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV01P□□□C	0.25(85°C)	Reflow	12	10ohm to 1M ohm ±10%	±150
PV01W□□□C	0.25(85°C)	Reflow	12	10ohm to 1M ohm ±10%	±150
PV01X□□□C	0.25(85°C)	Reflow	12	10ohm to 1M ohm ±10%	±150
PVG5A□□□C	0.25(70°C)	Reflow	11	10ohm to 2M ohm ±10%	±150
PVG5H□□□C	0.25(70°C)	Reflow	11	10ohm to 2M ohm ±10%	±150

Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

Lead Sealed Type Single-turn

PVC6 Series (Applied product to EVL. RoHS)



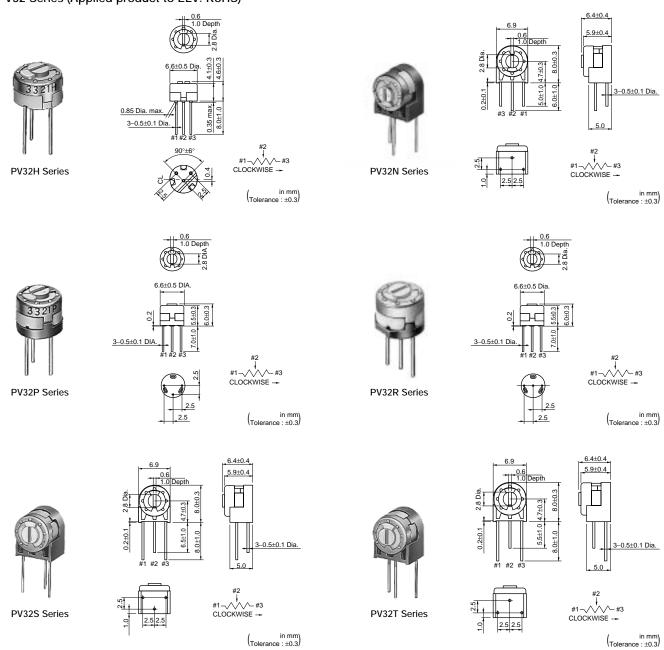
(n mm) Tolerance : ±0.3)

Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PVC6A□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	
PVC6D□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	
PVC6E□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	10ohm to 25kohm ±100
PVC6G□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	50kohm to 1Mohm ±150
PVC6H□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	2Mohm to 5Mohm ±100
PVC6M□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	
PVC6Q□□□C	0.5(70°C)	Flow/Soldering Iron	1(240°±5°)	10ohm to 5M ohm ±10%	

Operating Temperature Range: -55 to 125 °C

The order quantity should be an integral multiple of the "Minimum Quantity".

PV32 Series (Applied product to ELV. RoHS)



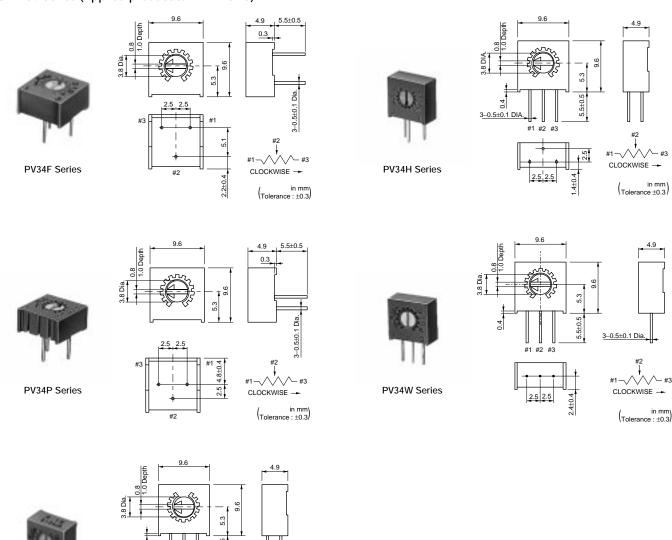
Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV32H□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100
PV32N□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100
PV32P□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100
PV32R□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100
PV32S□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100
PV32T□□□A	0.5(70°C)	Flow/Soldering Iron	1(230°±5°)	10ohm to 5M ohm ±20%	±100

Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

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PV34X Series

PV34 Series (Applied product to ELV. RoHS)



Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV34F□□□C	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm to 2M ohm ±10%	40.1.1.400.1.1450
PV34H□□□C	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm to 2M ohm ±10%	100hm to 1000hm ±150 2000hm to 2M0hm ±100
PV34P□□□C	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm to 2M ohm ±10%	200011111 to 2141011111 ±100

CLOCKWISE →

 $\binom{\text{in mm}}{\text{Tolerance}: \pm 0.3}$

The order quantity should be an integral multiple of the "Minimum Quantity".



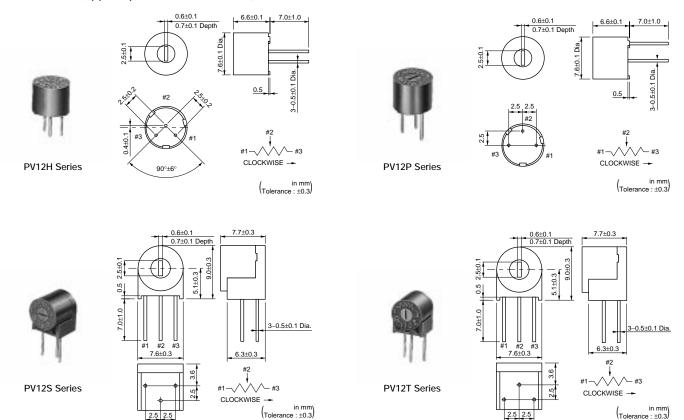
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Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)	
PV34W	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm to 2M ohm ±10%	10ohm to 100ohm ±150	
PV34X	0.5(70°C)	Flow/Soldering Iron	1(280°±15°)	10ohm to 2M ohm ±10%	200ohm to 2Mohm ±100	

Operating Temperature Range: -55 to 125 °C

Lead Sealed Type Multi-turns

PV12 Series (Applied product to ELV. RoHS)



Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV12H□□□A	0.5(70°C)	Flow/Soldering Iron	4	10ohm to 2M ohm ±10%	±100
PV12P□□□A	0.5(70°C)	Flow/Soldering Iron	4	10ohm to 2M ohm ±10%	±100
PV12S□□□A	0.5(70°C)	Flow/Soldering Iron	4	10ohm to 2M ohm ±10%	±100
PV12T□□□A	0.5(70°C)	Flow/Soldering Iron	4	10ohm to 2M ohm ±10%	±100

Operating Temperature Range: -55 to 125 °C

Lead Sealed Type Multi-turns

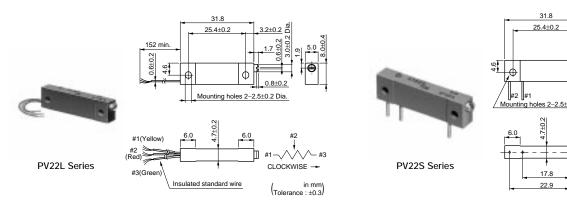
3.2±0.2 💆

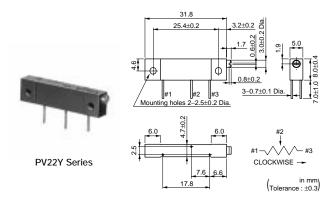
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(n mm) Tolerance : ±0.3)

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PV22 Series (Applied product to ELV. RoHS)



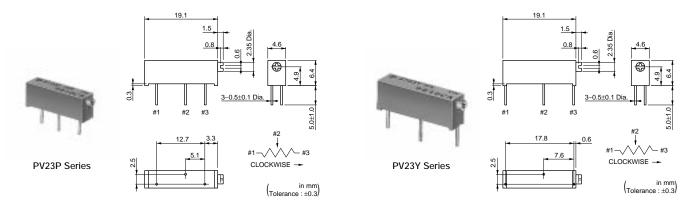


Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV22L□□□C	1.0(70°C)	Flow/Soldering Iron	22	10ohm to 2M ohm ±10%	±100
PV22S□□□C	1.0(70°C)	Flow/Soldering Iron	22	10ohm to 2M ohm ±10%	±100
PV22Y□□□C	1.0(70°C)	Flow/Soldering Iron	22	10ohm to 2M ohm ±10%	±100

Operating Temperature Range: -55 to 150 $^{\circ}\text{C}$

Lead Sealed Type Multi-turns

PV23 Series (Applied product to ELV. RoHS)



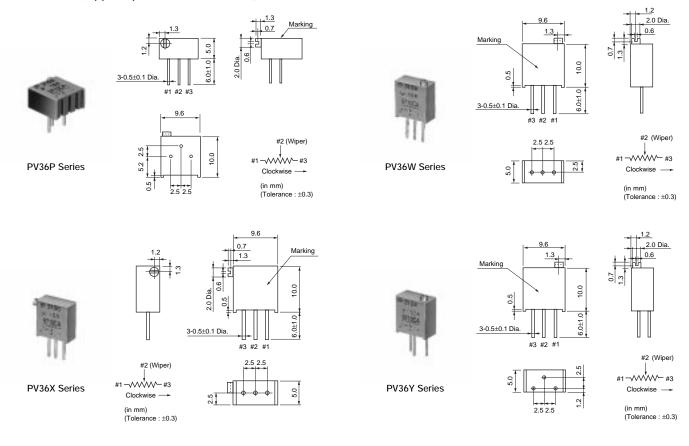
Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)	
PV23P□□□C	0.75(70°C)	Flow/Soldering Iron	15	10ohm to 2M ohm ±10%	10ohm to 100ohm ±150	
PV23Y□□□C	0.75(70°C)	Flow/Soldering Iron	15	10ohm to 2M ohm ±10%	200ohm to 2Mohm ±100	

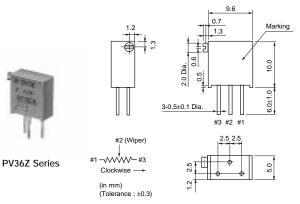
Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

The order quantity should be an integral multiple of the "Minimum Quantity" shown in the beginning of this catalog.

Lead Sealed Type Multi-turns

PV36 Series (Applied product to ELV. RoHS)



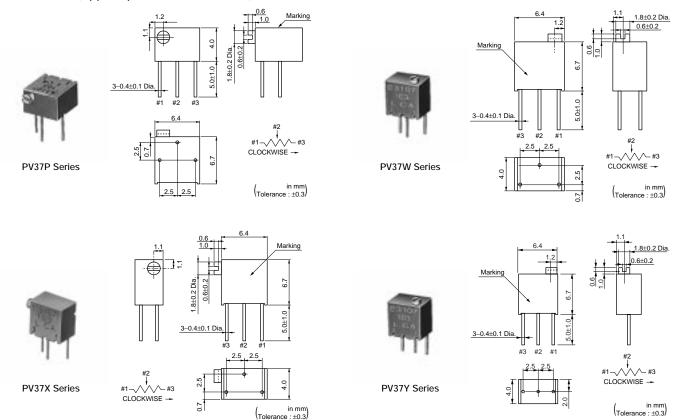


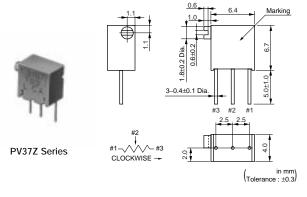
Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)	
PV36P□□□C	0.5(70°C)	Flow/Soldering Iron	25	10ohm to 2M ohm ±10%		
PV36W□□□C	0.5(70°C)	Flow/Soldering Iron	25	10ohm to 2M ohm ±10%	10ohm to 100ohm ±150 200ohm to 2Mohm ±100	
PV36X□□□C	0.5(70°C)	Flow/Soldering Iron	25	10ohm to 2M ohm ±10%		
PV36Y□□□C	0.5(70°C)	Flow/Soldering Iron	25	10ohm to 2M ohm ±10%		
PV36Z□□□C	0.5(70°C)	Flow/Soldering Iron	25	10ohm to 2M ohm ±10%		

Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

Lead Sealed Type Multi-turns

PV37 Series (Applied product to ELV. RoHS)



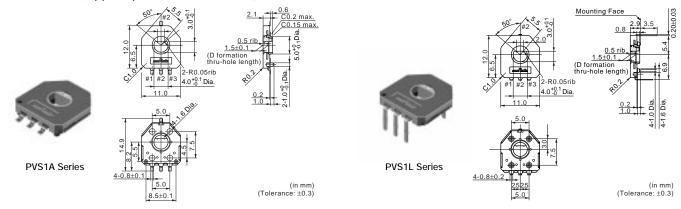


Part Number	Power Rating (W)	Soldering Method	Number of Turns (Effective Rotation Angle)	Total Resistance Value	TCR (ppm/°C)
PV37P□□□C	0.25(85°C)	Flow/Soldering Iron	12	10ohm to 2M ohm ±10%	±150
PV37W□□□C	0.25(85°C)	Flow/Soldering Iron	12	10ohm to 2M ohm ±10%	±150
PV37X□□□C	0.25(85°C)	Flow/Soldering Iron	12	10ohm to 2M ohm ±10%	±150
PV37Y□□□C	0.25(85°C)	Flow/Soldering Iron	12	10ohm to 2M ohm ±10%	±150
PV37Z□□□C	0.25(85°C)	Flow/Soldering Iron	12	10ohm to 2M ohm ±10%	±150

Operating Temperature Range: -55 to 125 $^{\circ}\text{C}$

SMD Dust-proof Type 12mm Size

PVS1 Series (Applied product to ELV. RoHS)



Part Number	Total Resistance Value (k ohm)	Linearity (%)	Effective Rotational Angle	TCR	Rotational Life
PVS1A103A01	10 ±30%	±2	333.3° (Ref.)	±500ppm/°C	1M cycles
PVS1L103A01	10 ±30%	±2	333.3° (Ref.)	±500ppm/°C	1M cycles

Operating Temperature Range: -40 to 85 °C