

PRECISION ELECTRONIC COMPONENTS MFG. CO.



COMMITTED TO QUALITY

PSP SERIES

PRECISION AND INSTRUMENTATION APPLICATIONS.
SILICONE COATED. AXIAL.

- * PRECISION RESISTORS
- * CLOSE TOLERANCE AND HIGH STABILITY
- * HIGH RESISTANCE VALUES
- * VERY LOW TEMPERATURE COEFFICIENTS OF RESISTANCE
- * NON-INDUCTIVE TYPES
- * REFERENCE STANDARD
 - MIL-R-26

The precision resistors of this series are made to extremely close tolerances, are highly stable and have low temperature coefficients. The temperature rise at the rated wattage is kept to less than 50°C so that the overall excursion of resistance at full load will be less than 0.1% even in extreme case.

Wire wound resistors are superior to metal film resistors in stability and temperature coefficient. There is no voltage coefficient effect. Multiple coats of silicone compounds are used which ensure almost nil drift even in values as low as 0.1ohm. TCRs of 10 to 15ppm/°C are achieved in production

by careful control in the selection of resistance wires and by repeated annealing and stabilizing operations. Very high values are also available in this series using superfine wires.

This series is recommended for application in ladder networks, A/D converters, dividers and shunts in digital equipment. The non-inductive resistors of the series are particularly fast and have low and stable time constants. Their performance has been tested upto 50MHZ and they have been extensively used in magnetic memories of computers, wideband antennae and in oscilloscopes.

SPECIFICATIONS

TOLERANCE : ±0.50% FOR 0R1 TO 0R9.
±0.10% FOR 1R0 TO 99R9
±0.05% FOR 100R TO 100K
[CLOSER TOLERANCE AND MATCHING CAN BE ACHIEVED. PLEASE REFER FOR SPECIFIC REQUIREMENT.]

TEMP. COEFF. OF RESISTANCE [TCR] : ±90 PPM/°C.
±30 PPM/°C.
±10 PPM/°C.

STABILITY : ±0.01%

POWER RATING : RATED @ 40°C AMBIENT AND DERATED LINEARLY TO ZERO POWER AT 155°C [FIG.2]

MAX. HOT SPOT TEMP. : 155°C.

HUMIDITY : 6 CYCLES OF HUMIDITY TEST [H13 CATEGORY].

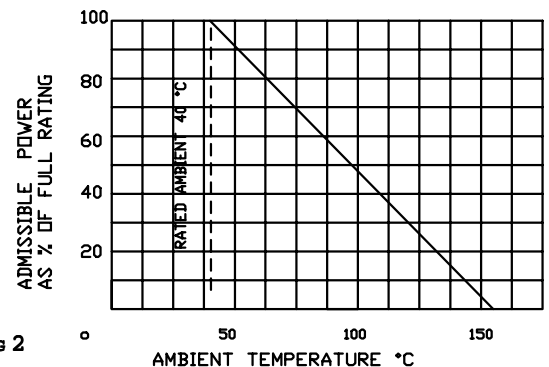


FIG 2

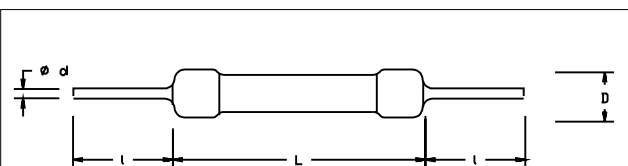


FIG 1

TABLE 1 : PSP SERIES - DIMENSION DETAILS - RESISTANCE RANGE

PEC TYPE	RATING	DIMENSIONS IN MM [IN]				RESISTANCE RANGE [OHMS]
		L	D	l	d	
		±2.00 [±0.079]	±0.50 [±0.020]	±3.00 [±0.118]	±0.10 [±0.004]	MIN. MAX.
PR1	0.25W	12.00 [0.480]	4.50 [0.177]	35.00 [1.378]	0.80 [0.031]	0R1 10K
PR2	0.50W	18.00 [0.709]	6.00 [0.236]	35.00 [1.378]	0.80 [0.031]	0R1 20K
PR3	1.00W	35.00 [1.378]	7.00 [0.276]	35.00 [1.378]	0.80 [0.031]	0R1 68K
PR4	2.00W	50.00 [1.967]	7.00 [0.276]	35.00 [1.378]	0.80 [0.031]	0R1 100K

Notes :

1. Values below 0R1 would be considered on request.
2. For Non-Inductive types, reduce the maximum resistance in above Table by half.

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