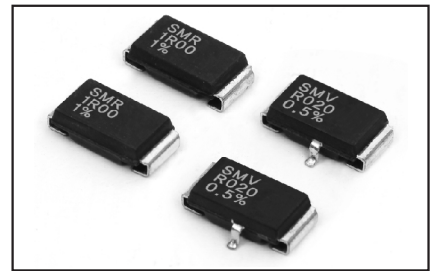


Precision Shunt Chip Resistors

- 5W permanent power at 65°C
- High pulse power rating
- Mounting: Reflow and wave-soldering
- Continuous current load up to 22A (SMR 10mΩ) / 70A (SMV 1mΩ)
- Applications: Current sensor for power hybrid applications, control systems for the automotive market, power modules, switch mode power supplies.



GENERAL SPECIFICATIONS

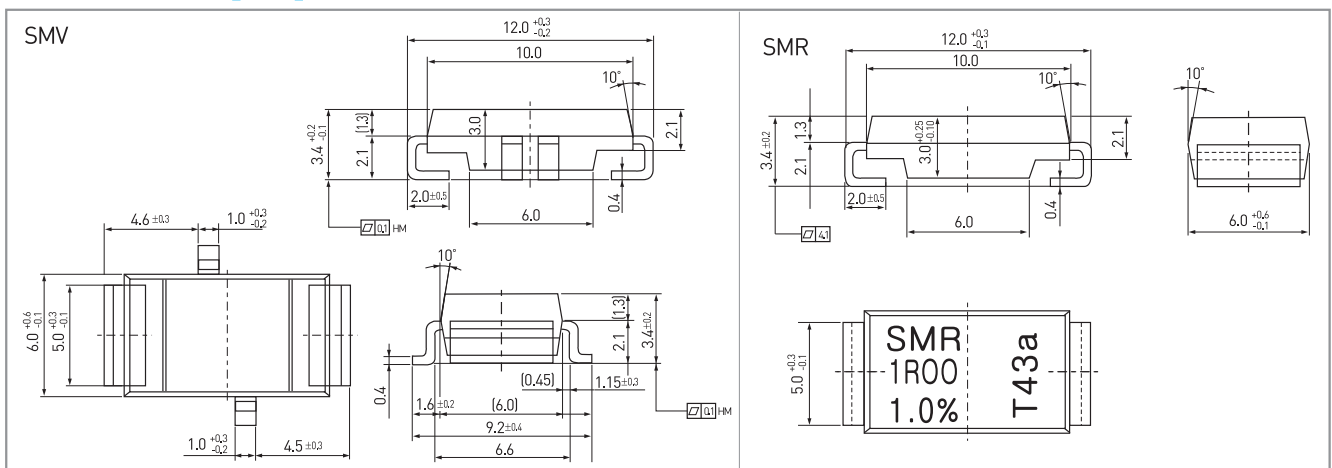
Type	Load Capacity (W)	Resistance Range(Ω)	Tolerance(%)	Terminal	TCR (20°C-60°C)	Dielectric Withstanding Voltage	Operating Temperature	Solder Reflow	Weight(g)
SMV	5	0.001 ~ 1	±0.5, ±1, ±5	4	±30ppm/°C	AC/DC 1000V	-55°C~+140°C	Max.255°C (t < 40sec)	0.65
SMR	5	0.01 ~ 4.7	0.5(≥0.05Ω), ±1, ±5	2	±50ppm/°C				0.63

CHARACTERISTICS

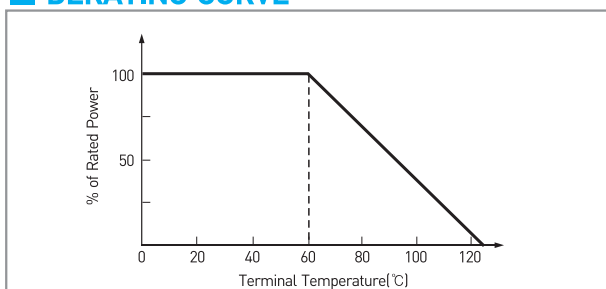
Values in [] mean change in Ω after test

Stability (Nominal load)	< 0.5%	After 2000hours (Terminal temperature=65°C)
Thermal Shock	±0.1%	-65°C, 25°C, 125°C, 25°C, 25cycles
Short Time Overload	±0.2%	5 × Power rating 5seconds
Resistance to Solvents	No Damage	IPA 3minutes
Low temp. Storage and Operation	±0.1%	MIL-R-26E
Thermal Strength	±0.02%	44N, 5~10seconds
Resistance to Soldering Heat	±0.1%	260°C 10seconds
Moisture Resistance	±0.1%	Near 100°C RH, +25°C, +65°C, -10°C 10cycles (10days)
Shock	±0.2%	MIL-STD-202 Method 213-A
Vibration, High Frequency	±0.2%	MIL-STD-202 Method 204D-B
Load Life	±0.2%	Rated Power(1.5hours on-0.5hour off) 2000hours
Storage Life at Elevated Temperature	±0.3%	MIL-STD-202 method 108A-F
High Temperature Exposure	±0.2%	140°C, 2000hours
Current Noise	±0.01%	MIL-STD-202 method 308
Voltage Coefficient	linearity error less than 120dB	MIL-STD-202 method 309
Thermal EMF	3μV/°C maximum	0 ~ 100°C
Frequency Characteristic	< 10nH	Inductivity

DIMENSIONS [mm]



DERATING CURVE



ORDERING PROCEDURE EXAMPLE

Model	Resistance	Tolerance[%]
SMV	4.7mΩ	±0.5

- Standard Resistance E-06 Series
- Taping Standard Quantity

SMV: 1500pcs
SMR: 1500pcs