

20W TO-263 HIGH POWER SURFACE MOUNT RESISTORS

Features

- Non-Inductive, Small, 20 Watt high power resistor.
- TO-263 surface mount package offering a very low thermal resistance.
- Small thin package for high density PCB installation.
- RoHS compliant.
- Suitable for board mounting with either solder or clip.

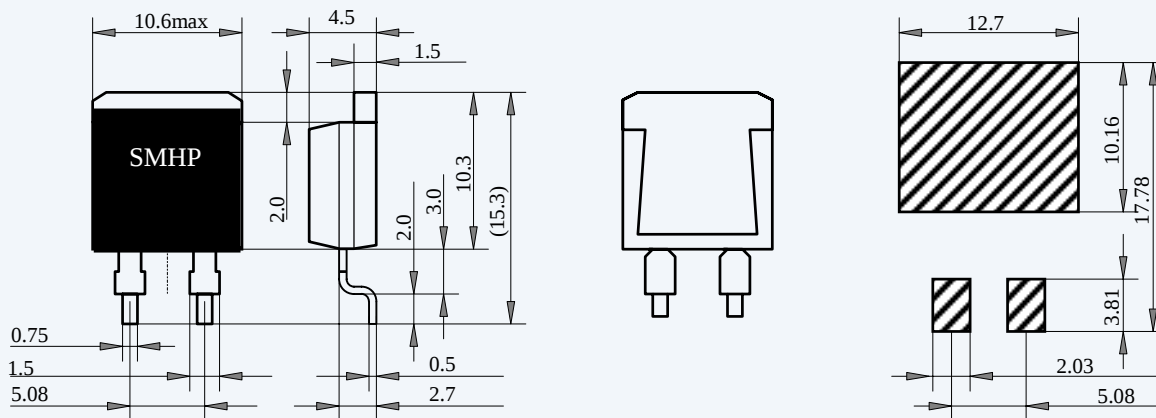
Applications

- High frequency emitter resistors in switching power supplies.
- High precision CRT color video amplifiers.
- High frequency snubber and pulse handling circuits.
- Pulse generator load resistors.
- In-rush current protection
- Bleeder Resistors



Specification

Dimensions (mm)



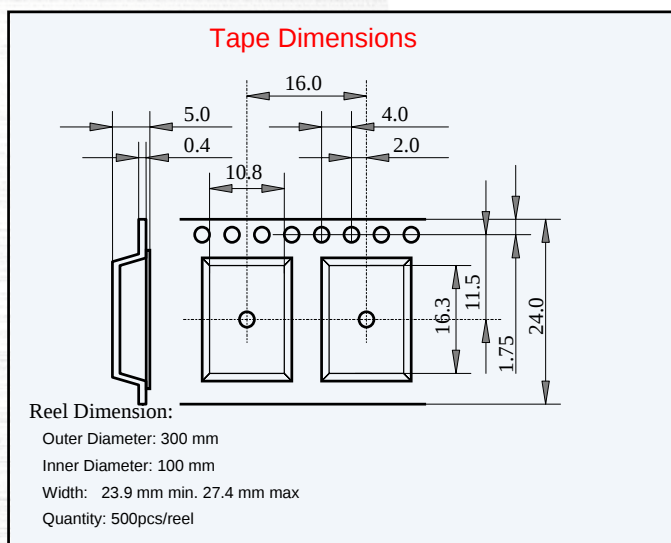
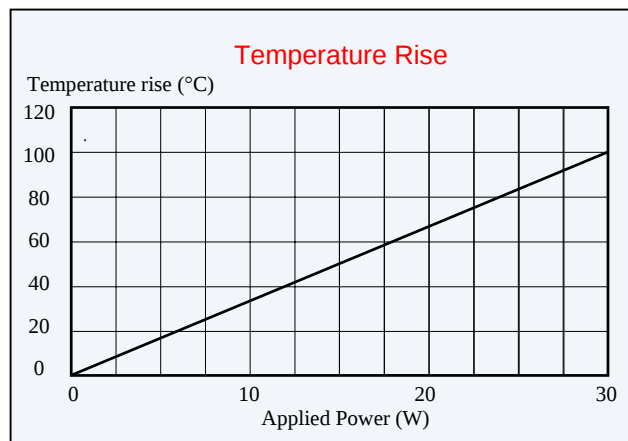
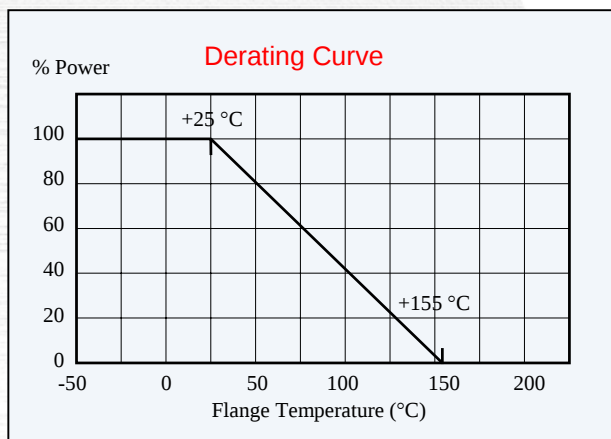
Specifications subject to change without notice

Items	Specification			Test Conditions
Power Rating	20 Watt			-55°C to 25°C flange temperature
Power Rating	2.25 Watt			Without heatsink
Thermal Resistance	3.3°C/W			Resistor hot spot to flange
Resistance Range	0.01-0.09 Ω	0.1-9.1 Ω	10-220 Ω	Up to 51KΩ also available
Nominal Resistance Series	E6	E12	E24	Including 2.5Ω and 5.0 Ω
TCR(ppm/°C)	250	100	50	For -55°C to +155 °C
Tolerance	+/-5%	+/-1% & +/-5%	+/-1%	
Operation Temp. Range	-55°C to +155°C			
Max. Operating Voltage	500V or $\sqrt{P \cdot R}$			
Dielectric Withstanding Voltage.	2000 V DC			60 seconds.
Load Life	$\Delta R \pm (1.0\% + 0.05 \Omega)$			25°C, 90 min.ON, 30 min.OFF, 1000 hours.
Humidity	$\Delta R \pm (1.0\% + 0.05 \Omega)$			40°C, 90-95%RH, DC 0.1W, 1000 hours.
Temp. Cycle	$\Delta R \pm (0.25\% + 0.05 \Omega)$			-55°C, 30 min., +155°C, 30 min., 5cycles
Soldering Heat (Max)	$\Delta R \pm (0.1\% + 0.05 \Omega)$			250+/-5°C, 3seconds,
Solderability	Min. 90% coverage			230+/-5°C, 3seconds.
Insulation Resistance	Over 1,000 Meg Ω			Between terminals and tab.
Vibration	$\Delta R \pm (0.25\% + 0.05 \Omega)$			

Notes:

- Electrically isolated metal tab.
- Contact factory for custom products, non-standard values and tolerances.
- Current rating: 25A maximum.

SMHP 20



Ordering Information

Model	SMHP 20	500	F	Tolerance
Resistance Code				
0.1Ω : 0R100				J = 5% Tol
50 Ω : 500				F = 1% Tol
First two digits significant, last digit: number of trailing zeros				