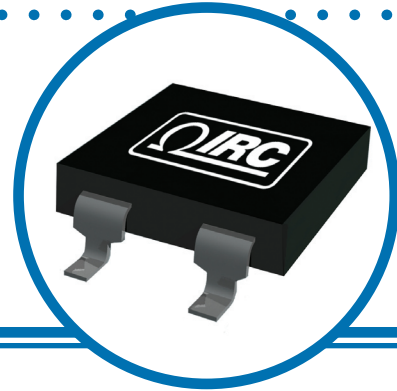


Surface Mount TO-263AB Power Resistor

SMHP Series

- RoHS compliant
- Popular D2PAK TO263 package
- Resistance values down to 0.010Ω
- Non-inductive thick film construction
- Suitable for board mounting with either solder or clip
- High frequency snubber and pulse handling circuits



Electrical Data

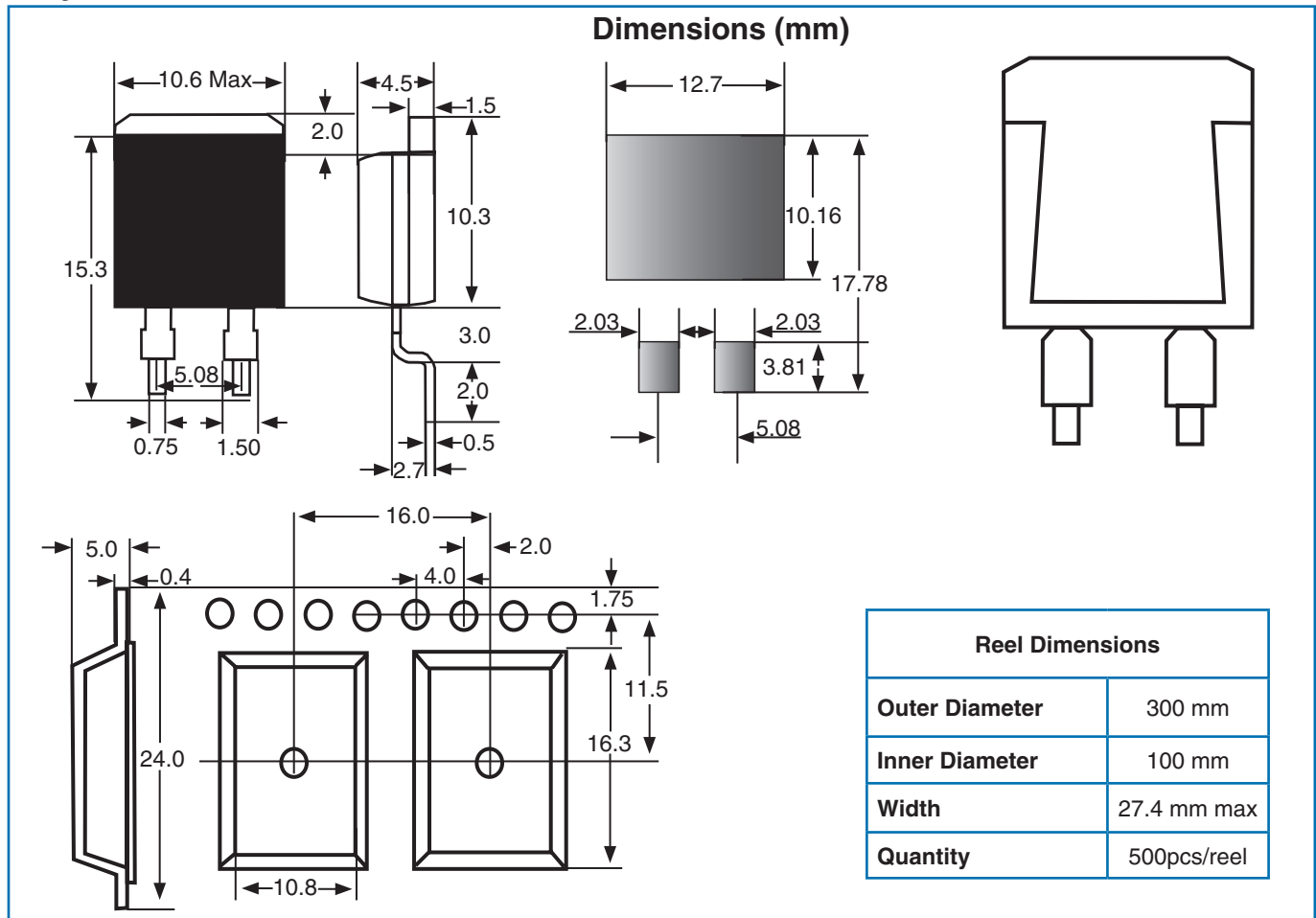
Item	Specification			Test Condition
	0.01Ω to 0.09Ω	0.1Ω to 9.1Ω	10Ω to 220Ω	
Resistance Range	0.01Ω to 0.09Ω	0.1Ω to 9.1Ω	10Ω to 220Ω	Up to 51KΩ also available
Tolerance	±5%	±1%, ±5%	±1%	
TCR (ppm/°C)	250	100	50	-55°C to +155°C
Nominal Resistance Series	E6	E12	E24	Including 2.5Ω and 5.0Ω
Thermal Resistance	3.3°C/W			Resistor hot spot to flange
Power Rating	20W			-55°C to +25°C flange temperature
Operating Temperature Range	-55°C to +155°C			
Maximum Operating Voltage	500V not to exceed $\sqrt{P \times R}$			
Dielectric Withstanding Voltage	2000 VDC			60 seconds
Load Life	$\Delta R = \pm 1.0\% + 0.5\Omega$			25°C, 90 min. ON; 30 min. OFF 1000 hours
Humidity	$\Delta R = \pm 1.0\% + 0.5\Omega$			40°C, 90% to 95%RH, DC 0.1W, 1000 hours
Temperature Cycle	$\Delta R = \pm 1.0\% + 0.5\Omega$			-55°C, 30 min., +155°C, 30 min., 5 cycles
Soldering Heat (Max)	$\Delta R = \pm 1.0\% + 0.5\Omega$			250±5°C, 3 seconds
Solderability	Min. 90% coverage			230±5°C, 3 seconds
Insulation Resistance	Over 1000MΩ			Between terminals and tab
Vibration	$\Delta R = \pm 0.25\% + 0.5\Omega$			

General Note

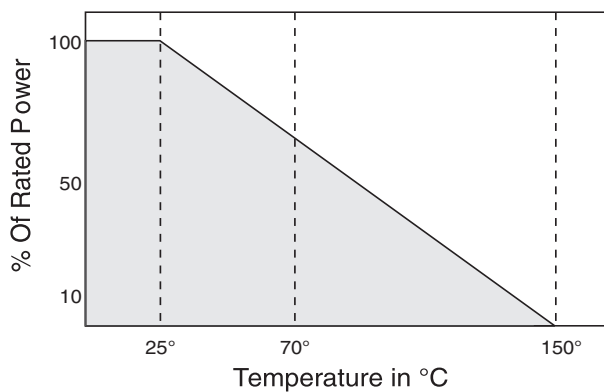
IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

Surface Mount TO-263AB Power Resistor

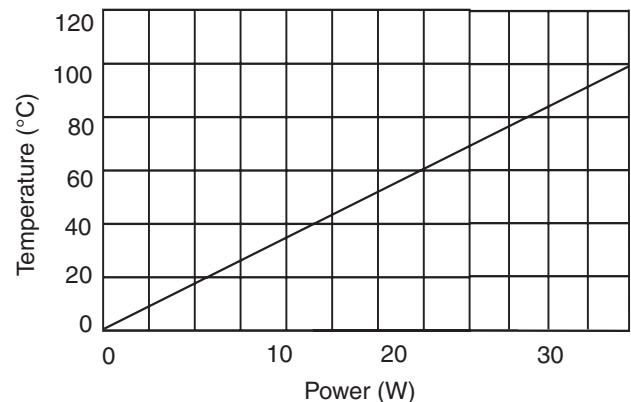
Physical Data



Power Derating Data



Temperature Rise Data



Surface Mount TO-263AB Power Resistor

Ordering Data

Prefix **TFP** - **SMHPLF** - **10R0** - **J**

Style **SMHPLF**

Resistance Code **10R0**

4-digit resistance code.

Ex: 10R0 = 10Ω, 1001 = 1KΩ

Reference EIA E-96 Standard Values Decade Table
for available values.

Tolerance Code **J**

K = ±10%; J = ±5%; F = ±1%

Note: 1% tolerance available above 0.1Ω

For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.

