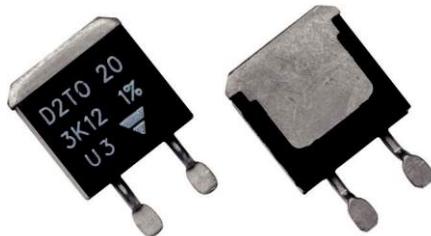
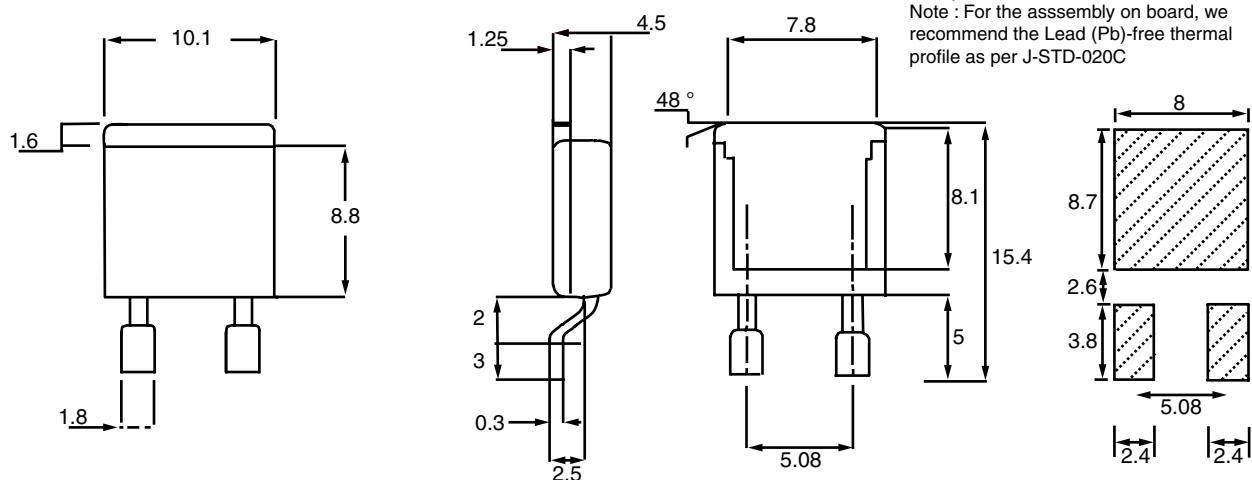


Surface Mounted Power Resistor Thick Film Technology



DIMENSIONS in millimeters



FEATURES

- 20 Watt at 25 °C on the board
- Surface mounted resistor - TO - 263 (D2 PAK) style package
- Wide resistance range from 0.01 Ω to 550 kΩ
- Non Inductive
- RoHS compliant
- Resistor isolated from Metal Tab
- Support soldering temperature of 260 °C



ELECTRICAL SPECIFICATIONS

Resistance Range	0.01 Ω to 550 kΩ
Tolerances (standard)	± 1 % to 10 %
Dissipation and Associated:	On board
Power Rating and Thermal Resistance	20 W at 25 °C $R_{TH} (j-c) : 6.5 \text{ °C/W}$
Temperature Coefficient	See Special Features table
Standard	± 150 ppm/°C
Limiting Element Voltage	250 V
Dielectric Strength Mil STD 202	2000 Vrms - 1 minute - 10 mA max (Between Terminals and Heatsink)
Insulation Resistance	$\geq 10^6 \text{ MΩ}$
Inductance	$\leq 0.1 \text{ μH}$
Critical Resistance	3.12 kΩ

SPECIAL FEATURES

Resistance Values	≥ 0.010	≥ 0.015	≥ 0.1	≥ 0.5
Tolerances	$\pm 1 \%$ at $\pm 10 \%$			
Typical temperature Coefficient (- 55 °C + 150 °C)	$\pm 900 \text{ ppm/ } ^\circ\text{C}$	$\pm 700 \text{ ppm/ } ^\circ\text{C}$	$\pm 250 \text{ ppm/ } ^\circ\text{C}$	$\pm 150 \text{ ppm/ } ^\circ\text{C}$

MECHANICAL SPECIFICATIONS	
Mechanical Protection	Molded
Resistive Element	Thick Film
Substrate	Alumina
Connections	Tinned Copper
Weight	2 g max.

ENVIRONMENTAL SPECIFICATIONS	
Temperature Range	- 55 °C to 155 °C
Climatic Category	55/155/56

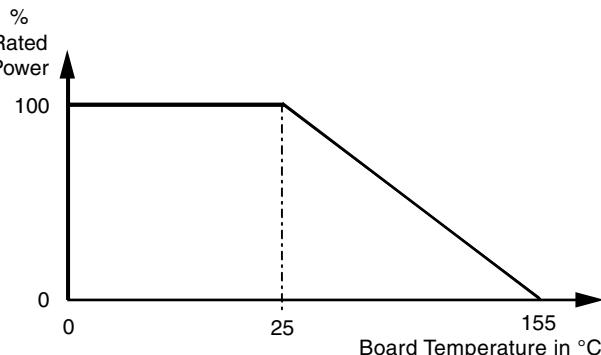
DIMENSIONS	
Standard package	TO 263 Style (D2 PAK)

PACKAGING

Reel
 Tube on request

POWER RATING

The temperature of the case should be maintained within the limits specified.



MARKING

Model, Style, Resistance Value (in Ohm), Tolerance (in %), Manufacturing Date, Vishay Trademark.

PERFORMANCE		
TESTS	CONDITIONS	TYPICAL DRIFTS
Momentary Overload	NF EN 140 000 CEI 115-1 2Pr/5s Us < 1.5UI	± (0.25 % + 0.005 Ω)
Rapid Temperature Change	NF EN 140 000 CEI 68214 Test Na 5 cycles - 55 °C to + 155 °C	± (0.5 % + 0.005 Ω)
Load Life	NF EN 140 000 1000h Pr at + 25 °C	± (1 % + 0.005 Ω)
Humidity (Steady State)	NF EN 140 000 56 days R.H > 95 %	± (0.5 % + 0.005 Ω)
Vibration	MIL STD 202 Method 204 C - Test. D	± (0.2 % + 0.005 Ω)
Termination Strength	MIL STD 202 Method 211 Cond. A1	± (0.2 % + 0.005 Ω)
Shock	100 G, MIL STD 202 Method 213 Cond.I	± (0.5 % + 0.005 Ω)

ORDERING INFORMATION							
D2TO	20	C	100 kΩ	± 1 %	XXX	e3	
MODEL	STYLE	CONNECTIONS	RESISTANCE VALUE	TOLERANCE	CUSTOM DESIGN	LEAD (Pb)-FREE	
				± 1 % ± 2 % ± 5 % ± 10 %	Optional on request: shape, etc		

SAP PART NUMBERING GUIDELINES							
							-
MODEL	STYLE	CONNECTIONS	RESISTANCE VALUE	TOL	PACK	LEAD (Pb)-FREE	

SAP Part Number D2TO20C10002FRE3



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