



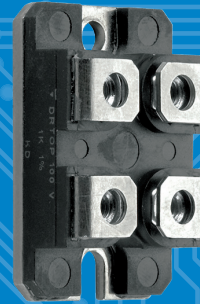
Vishay Sfernice Thick Film Power Resistors



Models LPS300, LPS600, LPS800, and LPS1100:
300 W to 1100 W



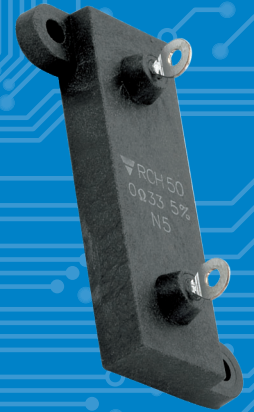
Model RPH100: 100 W



Models RTOP50, RTOP100, and
RTOP200: 50 W to 200 W



Model LCH100: 100 W



Model RCH50: 50 W



Model RCH25: 25 W



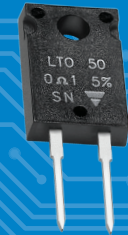
Model RCH10: 10 W



Model RCH5: 5 W



Model LTO100F: 100 W



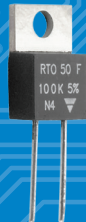
Model LTO50F: 50 W



Model LTO30F: 30 W



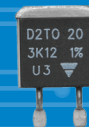
Model RTO20F: 20 W



Model RTO50F: 50 W



Model D2TO35: 35 W



Model D2TO20: 20 W

Approximate size shown

All parts are RoHS-compliant / Product specifications on back / Datasheets are available at www.vishay.com
For technical support please contact your Vishay sales representative or sfer@vishay.com

Vishay Sfernice Thick Film Power Resistors - All Parts are RoHS-Compliant

MODELS	LPS	RPH	RTOP	LCH	RCH	LTO	RTO	D2TO
Resistance Range	0.3 Ω to 900 kΩ 1.0 Ω to 1.3 kΩ (1100 W only)	0.092 Ω to 1 MΩ	0.046 Ω to 1 MΩ	0.06 Ω to 1 MΩ	0.24 Ω to 1 MΩ	0.010 Ω to 1 MΩ	0.010 Ω to 1 MΩ	0.010 Ω to 500 kΩ
Power Rating Mounted	300 W, 600 W, 800 W, 1100 W	100 W	50 W to 200 W	100 W	5 W to 50 W	30 W to 100 W	20 W and 50 W	20 W and 35 W
Limiting Element Voltage	5000 V _{RMS}	1900 V _{RMS}	500 V _{RMS} to 1500 V _{RMS}	1285 V _{RMS}	160 V _{RMS} to 1285 V _{RMS}	500 V _{RMS}	250 V _{RMS} to 300 V _{RMS}	500 V _{RMS}
Temperature Range	-55 °C to +120 °C (LPS300) -55 °C to +155 °C (LPS600) -55 °C to +175 °C (LPS800) -55 °C to +200 °C (LPS1100)	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +125 °C	-55 °C to +155 °C	D2T020: -55 °C to +125 °C D2T035: -55 °C to +175 °C
TC ppm/°C	±150 ppm/°C > 1 Ω	±150 ppm/°C > 1 Ω	±150 ppm/°C > 1 Ω	±150 ppm/°C > 1 Ω	±150 ppm/°C > 1 Ω	±150 ppm/°C > 0.5 Ω	±150 ppm/°C > 0.5 Ω	±150 ppm/°C > 0.5 Ω
Thermal Resistance	0.039 °C/W	0.55 °C/W	0.5 °C/W to 1 °C/W	1.0 °C/W	0.8 °C/W to 4.8 °C/W	4.2 °C/W to 1.5 °C/W	RT020 = 6.5 °C/W RT050 = 2.6 °C/W	D2T020 = 6.5 °C/W D2T035 = 4.2 °C/W
Overload Capacity Short Duration (seconds)	2 PR/5 s	4 PR/5 s	2.5 PR/5 s	2 PR/5 s	2 PR/5 s	1.5 PR/5 s	2 PR/5 s < 2 Ω 1.6 PR/5 s > 2 Ω	D2T020: 2 PR / 5 s < 2 Ω 1.6 PR / 5 s > 2 Ω D2T035: 1.7 PR / 5 s < 2 Ω 1.4 PR / 5 s > 2 Ω
Dielectric Strength	7000 V _{RMS} or 12000 V _{RMS}	5000 V _{RMS}	2500 V _{RMS}	3500 V _{RMS}	2000 to 3500 V _{RMS}	1500 V _{RMS}	2000 V _{RMS}	2000 V _{RMS}
Standard Tolerance (available tolerance)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)	±5 % (1 % to 10 %)
Product Features	All models have the same packaging size (57 mm x 60 mm) High insulation: 10 MΩ Non-inductive	M4 screw connection 65 mm x 47 mm	4 model ranges Screw shunt connection SOT-227	High Insulation: 10 MΩ 16 mm x 48 mm	4 model ranges Connections: flat w/ hole/ round lead or M2 screw RCH5: 9 mm x 17 mm RCH10: 11 mm x 19 mm RCH25: 14 mm x 28 mm RCH50: 16 mm x 49 mm	3 model ranges Direct mounting: Ceramic on heatsink LTO100F: TO-247 LTO50F: TO-220 LTO30F: TO-220	2 model ranges Through-hole design RTO20F: TO-220 RTO50F: TO-220	2 model ranges Standard package for SMD solder reflow Secure at 270 °C/10 s D2T035: TO-263 D2T020: TO-263

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