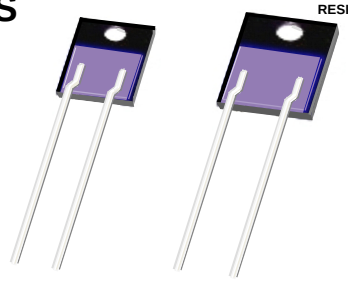
POWER THICK FILM ON STEEL RESISTORS
TO126, TO220, and TO247, 25 to 100 WATT

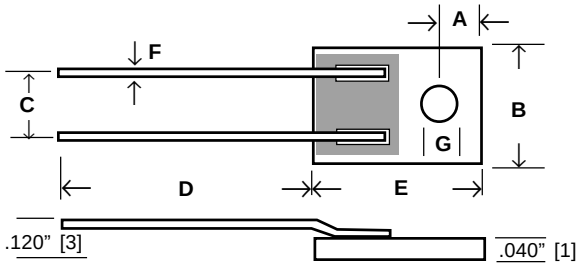
HDP SERIES

RoHS Term.W is RoHS compliant & 260°C compatible



FEATURES
- ❒ Industry's most economical TO-style power resistors!
- ❒ Standard resistance range: 0.05Ω to 10KΩ
- ❒ Standard tolerance: ±1%, ±2%, ±5% (available to 0.1%)
- ❒ Flame resistant construction
- ❒ Non-Inductive performance
- ❒ Resistor is electrically isolated from the mounting surface

OPTIONS
- ❒ Option P: Increased pulse capability
- ❒ Option EQ: 24-hour burn-in at full rated wattage (free air)
- ❒ Option 33: 1KV Dielectric Stength
- ❒ Numerous design modifications are available (special marking, custom lead wires, hi-rel screening, etc). Customized components are an RCD specialty!



Award winning design! High power density at low prices! RCD Series HDP resistors were designed to offer precision performance in TO-126, TO-220 and TO-247 style packages. The cost effective design features an oxidized stainless steel carrier which is insulated with a proprietary hi-temp dielectric upon which the resistive film and solder pads are deposited. This enables reduced thermal resistance over conventional ceramic or ceramic/copper sandwich designs, resulting in increased power and overload capability (pulse graph available). The resistive film is insulated with a specialty flame resistant coating offering superior environmental protection.

TYPICAL PERFORMANCE CHARACTERISTICS

Load Life	±1%
Moisture Res.(Mil-Std-202 M106)	±0.5%
Thermal Shock (Mil-Std-202, Method 107 Cond.C	±0.3%
Overload (2x W, 1Sec, nte1.5x Max V)	±0.3%
Terminal Pull Strength	5 lbs direct, 2 lbs peel
Temp.Coefficient 0.5Ω & above 0.05Ω 0.49Ω	100ppm (50& 80ppm opt.) 200ppm (100ppm opt.)
Dielectric Strength [1]	750V Std. (Opt.33= 1KV)
Insulation Resis. [1]	1000M min.
Operating Temperature Range	-55°C to +200°C

[1] Between two terminals and mounting surface, DCV

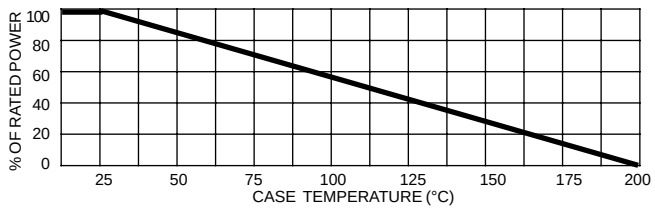
SPECIFICATIONS

RCD Type	Wattage @ 25°C	Max. Voltage	Resistance Range	DIMENSIONS Inch [mm]						
				A	B	C	D	E	F Typ.	G Typ.
HDP126	25W (2W free air)	300V[3]	0.05Ω - 10K[3]	.091±.01 [2.3±.25]	.323±.012 [8.2±.3]	.200±.012 [5.08±.3]	.940 Min. [24]	.465±.012 [11.8±.3]	.031 [.8]	.098 [2.5]
HDP220S[2]	40W (2.5W free air)	300V[3]	0.05Ω - 10K[3]	.117±.01 [3±.25]	.400±.012 [10.16±.3]	.200±.012 [5.08±.3]	0.5 Min. [12.7]	.600±.012 [15.24±.3]	.031 [.8]	.142 [3.6]
HDP220	50W (3W free air)	300V[3]	0.05Ω -10K[3]	.117±.01 [3±.25]	.425±.012 [10.8±.3]	.200±.012 [5.08±.3]	.940 Min. [24]	.650±.012 [16.5±.3]	.031 [.8]	.118 [3]
HDP247	100W (5W free air)	350V[3]	0.05Ω -10K[3]	.156±.01 [4±.25]	.630±.012 [16.0±.3]	.400±.012 [10.16±.3]	.940 Min. [24]	.820±.012 [20.8±.3]	.031 [.8]	.142 [3.6]

[2] Information on HDP220S is preliminary [3] Extended range available

POWER RATING

Power rating is based on the resistor being tightly screwed to a suitable heat sink (with thermal compound) to limit hot spot case temperature to 200°C. Derate wattage by .57%/°C above 25°C (as depicted in chart below). Mounting torque not to exceed 8 in-lbs. Request Applic.Guide R-34 for additional information concerning heat-sink resistor mounting guidelines.



P/N DESIGNATION:

HDP220 ☐ - 1001 - F B ☐ W

RCD Type

Options: P, EQ, 33, etc (leave blank for std)

Resis.Code 1%: 3 signif. figures & multiplier, (R010=.01Ω, R100=.1Ω, 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1K)
Resis.Code 2%-10%: 2 signif. figures & multiplier, (R01=0.01Ω, R10=0.1Ω, 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1K)

Tolerance Code: J = 5%, G = 2%, F = 1%

Packaging: B = standard (bulk)

Optional Temp. Coefficient: 50 = 50ppm, 80 = 80ppm, 101 = 100ppm (leave blank for standard)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery)

RCD Components Inc, 520 E. Industrial Park Dr, Manchester, NH, USA 03109 rcdcomponents.com Tel: 603-669-0054 Fax: 603-669-5455 Email:sales@rcdcomponents.com