JCPF series cylindrical divider resistor

Applications

- Widely used in the instrument transformer industry
- Motor drives and control circuits
- Medical equipment (X-rays, etc.)
- High-voltage power supplies and new energy applications



Technical Features

- Cylindrical high-voltage divider resistor with a thick-film, non-inductive design and a ceramic rod.

- The JCPF series is a cylindrical voltage-divider network with three terminals. The divider ratio is (R1+R2)/R2. The ratio can be customized to customer requirements.

- Coating and terminal options: silicone resin coating (withstands 225°C). The two end terminals use M4 or M8 screw mounting. The divider terminal uses zinc-plated copper wire or M3 screw mounting. Terminal options can be designed to requirements.

Ordering Guide

Model: JCPF155

Resistance: 100M/100K

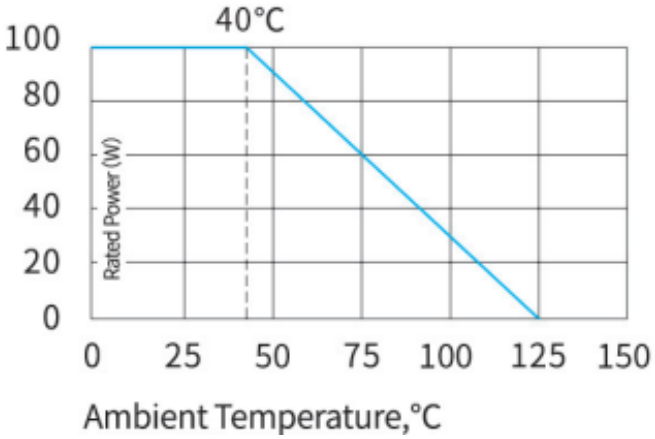
Absolute / relative tolerance: 0.1%, 0.2%, 0.5%

Absolute / relative TCR: 100PPM/25PPM

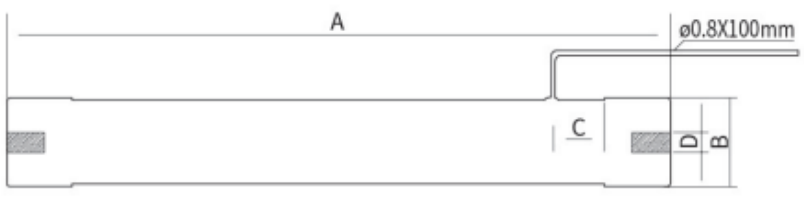
Terminal material: copper wire (default 100mm) / screws

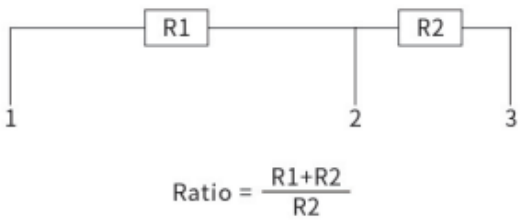
Special specifications and requirements can be customized by agreement.

Derating Curve



Outline Dimensions and Circuit





Specifications

Model	Max. voltage (kV/DC)	Rated power (W/40°C)	Dimensions: mm			
			A	B	C	D
TCPF70/20	10	10	70	21	8	M4
JCPF135/10	12	15	135	11	8	M4
JCPF138/15	20	20	138	16	8	M4
JCPF160/15	25	25	160	16	8	M4
JCPF180/15	30	30	180	16	10	M4

Main Technical Parameters

Resistance range (R1+R2)	2MΩ~2GΩ (customizable to customer requirements)
Divider ratio	Ratio can be adjusted to requirements (1000:1, 100:1)
Absolute tolerance	±0.1% ~ ±10.0%
Relative tolerance	0.1% ~1.0%
Absolute TCR	±25PPM/°C (25°C ~85°C)
Relative TCR	±25PPM/°C (adjustable to requirements)
Load life	1000 hours at rated power, Δ R ≤ ±0.15%
Moisture resistance	MIL-Std-202, Method 106, Δ R ≤ ±0.25% R
Thermal shock	MIL-Std-202, Method 107, condition C, Δ R ≤ ±0.20% R
Operating temperature range	-55°C ~125°C
End cap material	Oxidation-resistant nickel-plated copper caps
Terminal material	Default: tinned copper wire; customizable to customer requirements. Default: 10CM tinned copper wire.