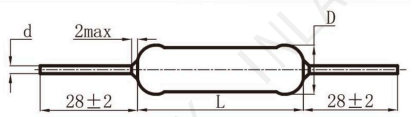
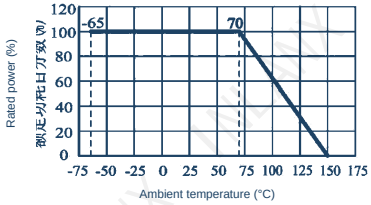
TRY-B Pyrotechnic Initiator Current Limiter Resistors

Outline Drawing



Derating Curve





Quality grades YC, national military and SAST. YC: Q/QJA-20086/4A-2019; national military: ZZR-Q/RU 21929.15-2008; generic specification: GJB 1929-1994. SAST follows its procurement specification. Out-of-range resistance or tolerance may be negotiated; consider surface heating under pulse overload.

Outline Dimensions • mm

Power W	Lmax	ΦDmax	Φd
0.25	7 max	2.5 max	0.6±0.05
0.5	10.5 max	3.9 max	0.6±0.05
1	13 max	4.5 max	0.8±0.05
2	17 max	6.5 max	0.8±0.05

Electrical Specifications

Power W	Resistance	Tolerance	Pulse W	Pulse ms	Fusing s	TCR ×10^-6/K
0.25	1 Ω~10 Ω	±2%, ±5%	65	200	0.3~4	±500
0.25	1 Ω~10 Ω	±2%, ±5%	145	100	0.15~1	±500
0.5	1 Ω~10 Ω	±2%, ±5%	125	200	0.3~4	±500
1	1 Ω~10 Ω	±2%, ±5%	250	200	0.3~4	±500
2	1 Ω~10 Ω	±2%, ±5%	500	200	0.3~4	±500

Main Inspection Items

Fusing time is measured until current falls below 1/50 of its initial test value under the specified pulse overload power.

Item	Requirement	Test method
Thermal shock	ΔR≤±(0.5%R+0.05Ω)	-65 to 150°C, 5 cycles
Low-temperature operation	ΔR≤±(0.5%R+0.05Ω)	-65°C, UR, 45 min
Lead strength	ΔR≤±(0.2%R+0.05Ω)	Pull 10/15/20 N; twist 360°, 3 times
Shock	ΔR≤±(0.5%R+0.05Ω)	980 m/s², 6 ms, sawtooth, 10 shocks
High-frequency vibration	ΔR≤±(0.5%R+0.05Ω)	10–2000 Hz, 0.75 mm, 150 m/s², 8 h
Overload	ΔR≤±(0.5%R+0.05Ω)	2.5UR, 5 s
Dielectric withstand	No breakdown or flashover	V-block: 0.25 W 200 V; 0.5 W 250 V; 1 W 300 V; 2 W 350 V; 1 min
Solvent resistance	No mechanical damage; legible markings	Immerse 1 min, brush 10 times, 3 rounds
Solderability	Solder coverage ≥95%	(245±2)°C, 5 s
Moisture resistance	ΔR≤±(1.5%R+0.05Ω)	RH 80–98%; -10 to 65°C; 24 h (UR for 4 h); 10 cycles
Insulation resistance	≥10 GΩ	100 V DC
Soldering heat	ΔR≤±(0.5%R+0.05Ω)	YC (260±5)°C, (10±1)s; others (350±10)°C, 3–3.5 s
Life	ΔR≤±(1.0%R+0.05Ω)	(70±5)°C, UR, 1000 h
Pulse overload	ΔR≤±(3.0%R+0.05Ω); fuse in 0.15–1 s at 145 W, otherwise 0.3–4 s	Pulse power and time per table; one pulse

Ordering Information

TRY-B-1W-1Ω-G

Model / Power / Nominal resistance / G±2%, J±5%.