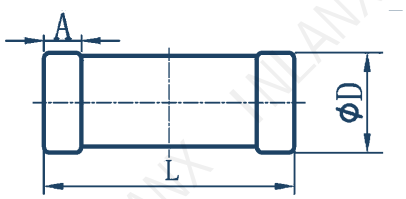
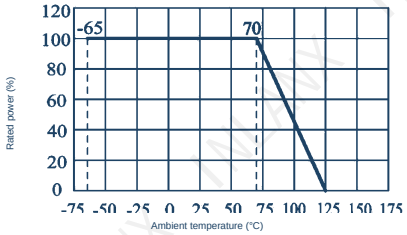
TRYC1 Cylindrical Surface-Mount Pyrotechnic Initiator Current Limiter Resistor

Outline Drawing



Derating Curve





Grades J, QJB and QJB/K. J and QJB: Q/RU 464-2012; QJB/K: Q/RU 20014-2020; general specification GJB 1432B-2009.

Dimensions • mm

Leadless cylindrical surface-mount construction.

Power W	Amax	ΦDmax	Lmax
0.25	1.6	2.5	6.2
0.5	2.2	3.5	9.1
1	2.5	4.0	12.1
2	3.0	5.5	15.2

Transient Overload and Electrical Ratings

One transient overload event; fusing means current falls below 1/50 of initial test current.

Power W	Resistance Ω	Tolerance %	Pulse power W	Time ms	Fuse s	TCR ×10□□/K
0.25	1–10	±5	50	200	0.2–5	±500
0.5	1–10	±5	100	200	0.2–5	±500
1	1–10	±5	200	200	0.2–5	±500
2	1–10	±5	400	200	0.2–5	±500

Main Inspection Items

Item	Test method	Requirement
Thermal shock	-65 to 125°C, 5 cycles	ΔR≤±(2%R+0.05Ω)
Low-temp operation	-65°C, UR, 45min	ΔR≤±(2%R+0.05Ω)
High-temp exposure	125±5°C, 100±4h	ΔR≤±(2%R+0.05Ω)
Specified shock	500m/s², 11ms, half-sine, 10 times	ΔR≤±(2%R+0.05Ω)
High-frequency vibration	10–2000Hz, 0.75mm, 150m/s², 4h	ΔR≤±(4%R+0.05Ω)
Short-time overload	2.5UR, 5s	ΔR≤±(2%R+0.05Ω), no arcing
Mounting integrity	0.25/0.5W: 5N; 1/2W: 10N; 30s	No mechanical damage
Solderability	235±5°C, 5s	Tin coverage ≥95%
Moisture resistance	RH80–98%, -10 to 65°C, 24h/cycle, 10 cycles	ΔR≤±(3%R+0.05Ω)
Insulation resistance	100V DC	Ri≥1GΩ
Soldering heat	245±5°C, 4–5s	ΔR≤±(4%R+0.05Ω)
Life	70±5°C, UR, 1.5h on/0.5h off, 1000h	ΔR≤±(4%R+0.05Ω)
Transient overload	As rated, once	ΔR≤±(5%R+0.05Ω), ≤200ms; fuse in 0.2–5s

Ordering Information

TRYC1-1W-10Ω-J

TRYC1 / power / nominal resistance / tolerance code J±5%.