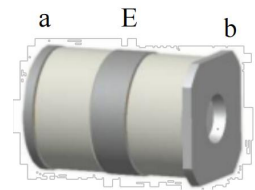
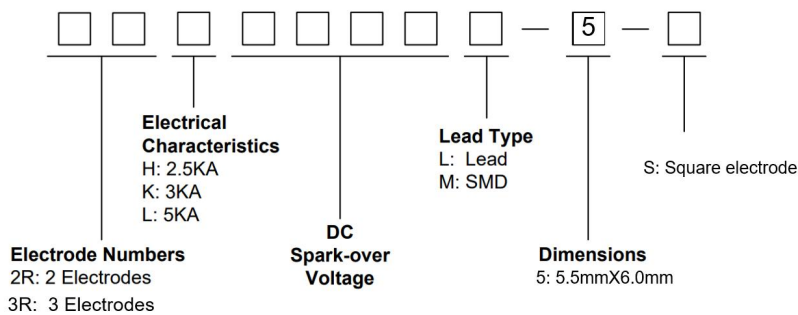


Features

- ◆ Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/ μ s
- ◆ Stable breakdown voltage
- ◆ High insulation resistance
- ◆ Low capacitance ($\leq 1.5\text{pF}$)
- ◆ High holdover voltage
- ◆ Large absorbing transient current capability
- ◆ Micro-Gap Design
- ◆ Storage and operational temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- ◆ Meets MSL level 1, per J-STD-020



Part Number Coding System



Applications

- ◆ Repeaters, Modems.
- ◆ Telephone Interface, Line cards.
- ◆ Data communication equipment.
- ◆ Line test equipment
- ◆ Communication: RS485 etc.

Dimensions

Ref.	Millimeters	
	Min	Max
D	4.8	5.2
d	4.8	5.2
T	7.4	7.8
B	0.4	
B1	1.5	

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	DC Spark-over Voltage(V)	Maximum Impulse Spark-over Voltage(V)	Nominal Impulse Discharge Current (KA)	Alternating Discharge Current(A)	Minimum Insulation Resistance		Maximum Capacitance (PF)
	100V/s	1000V/ μs	8/20 μs $\pm 5\text{times}$	50Hz, 1sec	Test Voltage	M Ω	1MHz
3RL090M-5S	$90 \pm 20\%$	600	5	5.0	50	1000	1.5

Items	Test Condition/Description	Requirement
DC Spark-over Voltage	The voltage is measured with voltage ramp $dv/dt=100\text{V/s}$.	To meet specified value
Maximum Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with voltage ramp $dv/dt=1000\text{V}/\mu\text{s}$.	
Impulse Discharge Current	Maximum surge current that can be applied through center electrode with 8/20 μs waveform, for 10 times with 3min interval time, which will be equally divided between each side electrode to center electrode, without causing the DC breakdown voltage to change more than 25% from its initial measured value. Waveform Parameters: $t_r=8\mu\text{s}$ $t_d=20\mu\text{s}$	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.	
Insulation Resistance	The resistance of gas tube shall be measured between two electrodes.	
Capacitance	The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz	

Reflow Soldering Parameters

