

Features

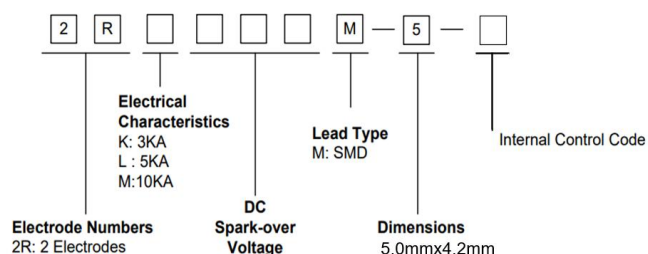
- ◆ Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs.
- ◆ Stable breakdown voltage.
- ◆ High insulation resistance.
- ◆ Low capacitance ($\leq 1.0\text{pF}$)
- ◆ High holdover voltage
- ◆ Large absorbing transient current capability.
- ◆ Micro-Gap Design
- ◆ Size: 5.0mm*4.2mm
- ◆ Storage and operational temperature: $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$
- ◆ Meets MSL level 1, per J-STD-020



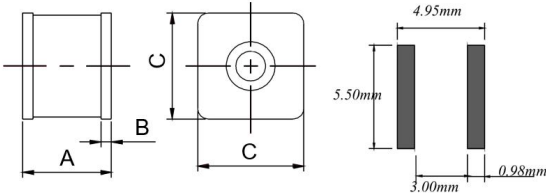
Applications

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

Part Number Coding System



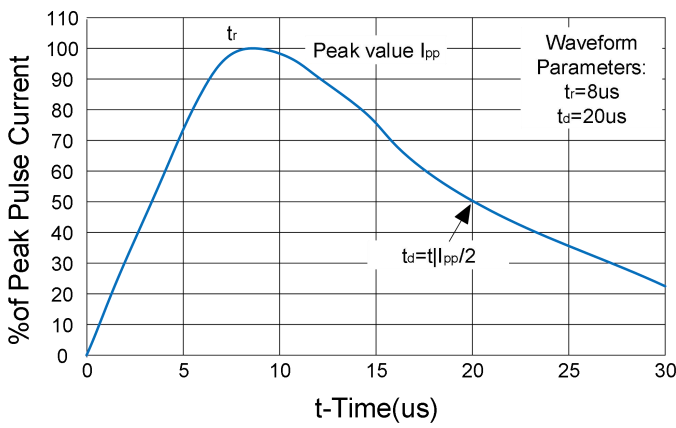
Dimensions

	Ref.	Millimeters	
		Min	Max
	C	4.8	5.2
	A	3.9	4.5
	B	0.3	0.7

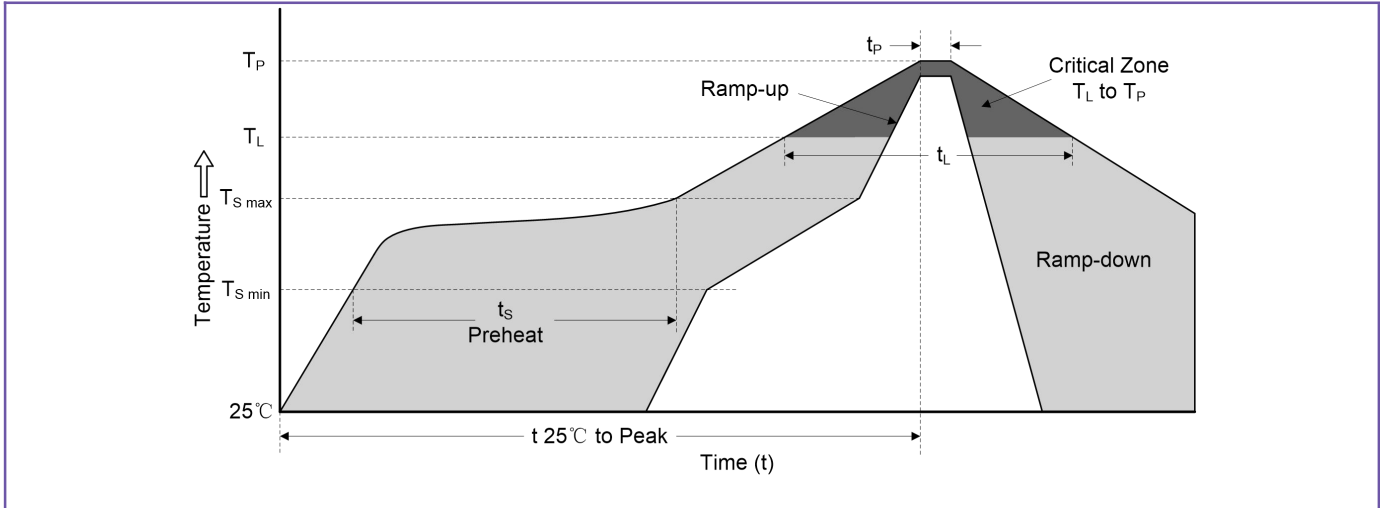
Electrical Characteristics (TA=25℃ unless otherwise noted)

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	8/20μs ±5times	50Hz, 1sec	Test Voltage	M Ω	1MHz
2RL075M-5SS	75±20%	700	5	5.0	25	1000	1.0
2RL090M-5SS	90±20%	650	5	5.0	50	1000	1.0
2RL120M-5SS	120±20%	700	5	5.0	50	1000	1.0
2RL150M-5SS	150±20%	700	5	5.0	100	1000	1.0
2RL230M-5SS	230±20%	700	5	5.0	100	1000	1.0
2RL250M-5SS	250±20%	700	5	5.0	100	1000	1.0
2RL300M-5SS	300±20%	800	5	5.0	100	1000	1.0
2RL350M-5SS	350±20%	850	5	5.0	100	1000	1.0
2RL400M-5SS	400±20%	900	5	5.0	100	1000	1.0
2RL470M-5SS	470±20%	1000	5	5.0	250	1000	1.0
2RL600M-5SS	600±20%	1200	5	5.0	250	1000	1.0
2RL800M-5SS	800±20%	1500	5	5.0	50	1000	1.0

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

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 $8/20\ \mu\text{s}$ surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time.  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



Reflow Condition		Lead-free Assembly
Pre heat	-Temperature Min (TS min)	150°C
	-Temperature Max (TS max)	200°C
	-Time (min to max) (ts)	60-120 seconds
Average ramp-up rate (TL to TP)		3°C/second max.
TS max to TL -Ramp-up Rate		3°C/second max.
Reflow	-Temperature (TL) (Liquidus)	217°C
	-Time (min to max) (ts)	60-150 seconds
Peak Temperature (TP)		260(+0/-5)°C
Time within 5°C of actual Peak Temperature (tp)		30 seconds
Ramp-down Rate		6°C/second max.
Time 25°C to Peak Temperature(Tp)		8 minutes max.
Do not exceed		260°C