DATA SHEET

GAS DISCHARGE TUBE – 3R-5-SS SERIES

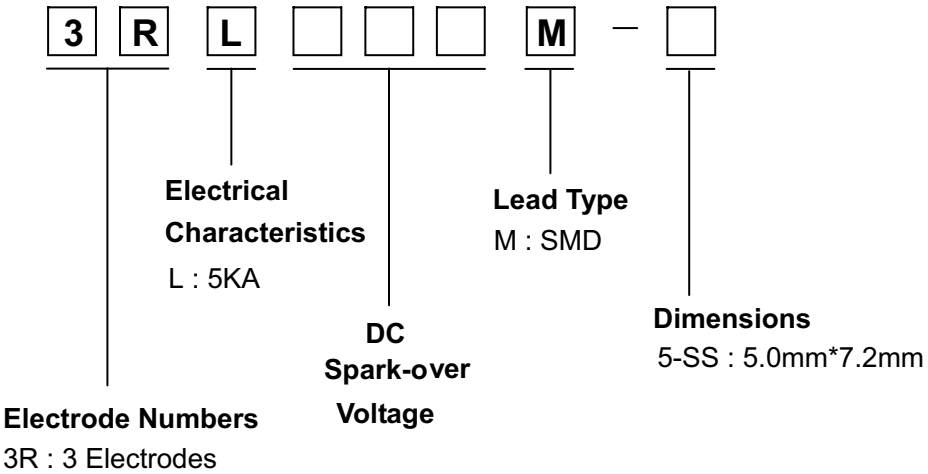
FEATURES

- ✧ 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 (≤2pF).
- ✧ High holdover voltage.
- ✧ Large absorbing transient current capability.
- ✧ Micro-Gap Design
- ✧ SIZE: 5.0*7.2mm
- ✧ Storage and operational temperature: -40℃ ~ +85℃
- ✧ Meets MSL level 1, per J -STD-020

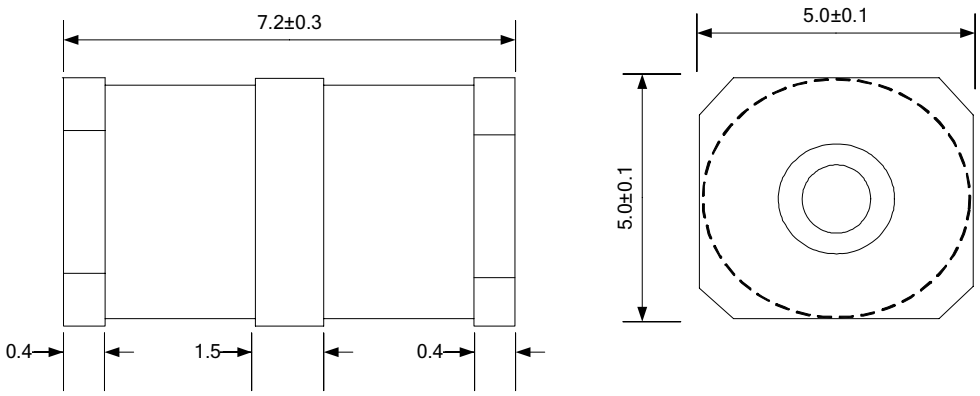
APPLICATION

- ✧ Repeaters, Modems.
- ✧ Telephone Interface, Line cards.
- ✧ Data communication equipment.
- ✧ Line test equipment.

PART NUMBER CODE



DIMENSIONS



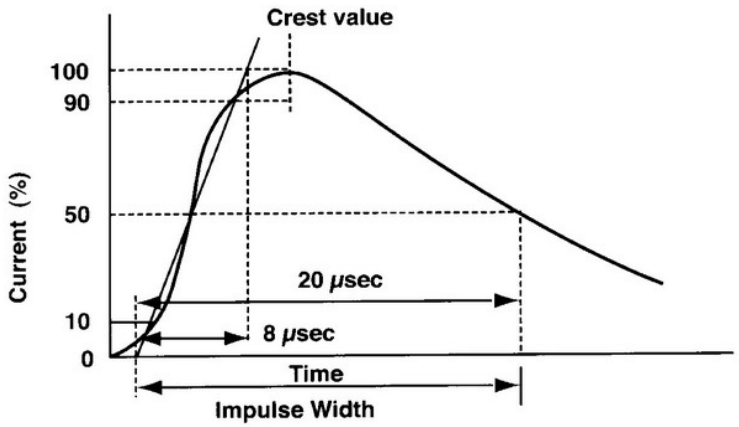
SS TYPE

ELECTRICAL CHARACTERISTIC

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	50Hz,0.2sec	10/1000μs, 200A	Test Voltage	(GΩ)	1MHz	
	(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)	
3RL075M-5-SS 3RL75M-5-SS	75±20%	700	5	5	300	25	1.0	2.0	3RL075-S
3RL090M-5-SS 3RL90M-5-SS	90±20%	600	5	5	300	50	1.0	2.0	3RL090-S
3RL120M-5-SS	120±20%	600	5	5	300	50	1.0	2.0	3RL120-S
3RL150M-5-SS	150±20%	600	5	5	300	100	1.0	2.0	3RL150-S

Note: Impulse discharge current for GDT is the total current equally divided between each line to ground

ELECTRICAL RATING

Item	Test Condition / Description	Requirement
DC Spark-over Voltage	The voltage is measured with a low rate of rise dv / dt=100V/s	To meet the specified value
Maximum Impulse Spark-over Voltage	The maximum impulse breakdown voltage is measured with a rise time of dv / dt=1000V/μs	
Impulse Discharge Current	The maximum current within gas tube voltage charge of ±30% when one impulse is applied. Applied waveform: 8/20μs 	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 0.2 sec. DC breakdown voltage may not change more than ±30% from its initial measured DC breakdown voltage. IR > 10^8 ohms (-20%, +30% for 70 – 90V).	
Insulation Resistance	The resistance of gas tube shall be measured each terminal each other terminal.please see above spec	
Capacitance	The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency :1MHz	