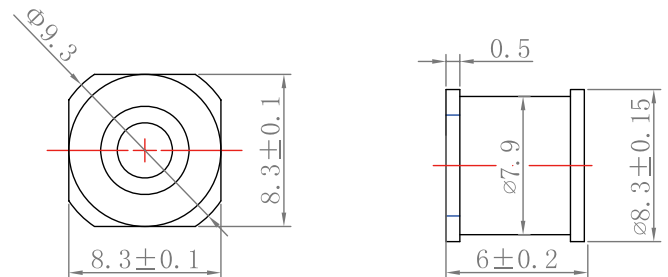


Gas discharge tubes (GDT) use noble gasses enclosed in ceramic tubes to provide an alternate circuit path for voltage spikes. The ceramic envelope and with nickel connectors allow for high loads and Ruilon offers products that function at 20KA,40KA,50KA,60KA,100KA&150KA. The breakdown voltages of the devices have a wide range (up to 20% tolerance). Major applications are high frequency telecommunication lines, stations, security systems, HID and high quality Surge Protection Devices (SPD).



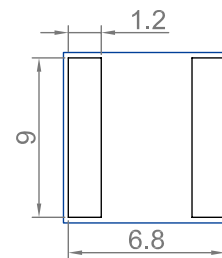
### Features

- Size: 8.3mm\*6.0mm
- DC Spark-over voltage: 75~800V
- Stable breakdown voltage.
- High insulation resistance.
- Low capacitance (<1pF)
- High holdover voltage.
- Large absorbing transient current capability.
- Low Capacitance
- Micro-Gap Design



### Applications

- Cable Modem
- xDSL
- Set-Top Box
- Satellite and CATV equipment
- Power supplier
- Consumer electronics
- General telecom equipment



### Product Name

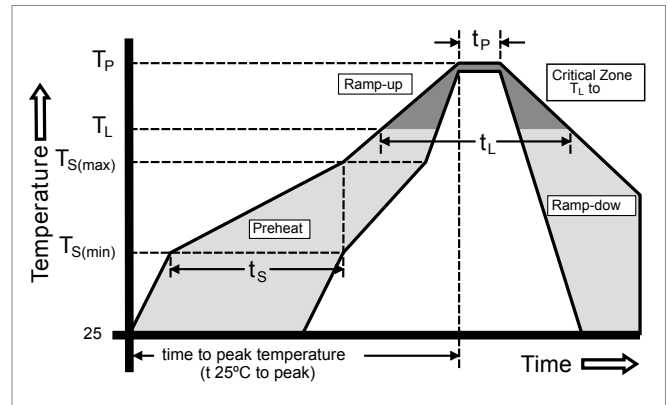
2	R	X	X	X	-	8	S
↓		↓				↓	↓
Stable breakdown voltage		DC Spark-over Voltage				Dimensions	Lead Type
2R : 2 Electrodes						8.3mm*6.0mm	S:SMD



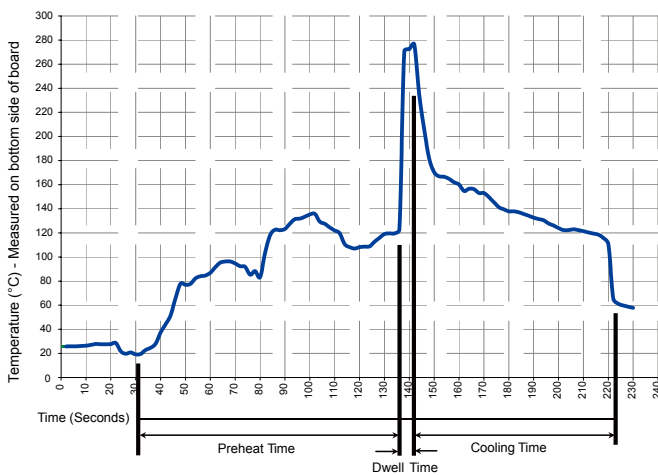
Part Number	DC Spark-over Voltage	Maximum Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 $\mu$ s)		Impulse Life (10/1000 $\mu$ s)	Normal Alternating Discharge Current		DC Holdover Voltage	Minimum Insulation Resistance	Maximum Capacitance (1MHz)
	100V/S	100V/ $\mu$ s	1KV/ $\mu$ s	1 times	10 times	100 A	50Hz 1Sec	Single 9 Cycles	<150ms		
	(V)	(V)	(V)	(KA)		Times	(A)		(V)		
2R075B-8S	75 $\pm$ 20%	600	700	15	10	500	10	15	52	1	0.8
2R090B-8S	90 $\pm$ 20%	600	700	15	10	500	10	15	52	1	0.8
2R150B-8S	150 $\pm$ 20%	500	700	15	10	500	10	15	52	1	0.8
2R230B-8S	230 $\pm$ 20%	500	600	15	10	500	10	15	80	1	0.8
2R250B-8S	250 $\pm$ 20%	500	600	15	10	500	10	15	150	1	0.8
2R300B-8S	300 $\pm$ 20%	550	650	15	10	500	10	15	150	1	0.8
2R350B-8S	350 $\pm$ 20%	600	700	15	10	500	10	15	150	1	0.8
2R400B-8S	400 $\pm$ 20%	650	750	15	10	500	10	15	150	1	0.8
2R470B-8S	470 $\pm$ 20%	750	850	15	10	500	10	15	150	1	0.8
2R600B-8S	600 $\pm$ 20%	900	1000	15	10	500	10	15	150	1	0.8
2R800B-8S	800 $\pm$ 20%	1000	1100	15	10	500	10	15	150	1	0.8
2R1000B-8S	1000 $\pm$ 20%	1500	1600	15	10	500	10	15	150	1	0.8

DC Spark-over Voltage	DC Measuring Voltage
70-90V	50V
150-400V	100V
470-1000V	250V

Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ( $T_{s(min)}$ )	150°C
	- Temperature Max ( $T_{s(max)}$ )	200°C
	- Time (Min to Max) ( $t_s$ )	60 – 180 secs
Average ramp up rate (Liquidus Temp ( $T_L$ ) to peak)		3°C/second max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		5°C/second max
Reflow	- Temperature ( $T_L$ ) (Liquidus)	217°C
	- Temperature ( $t_L$ )	60 – 150 seconds
Peak Temperature ( $T_p$ )		260 <sup>+0/-5</sup> °C
Time within 5°C of actual peak Temperature ( $t_p$ )		10 – 30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature ( $T_p$ )		8 minutes Max.
Do not exceed		260°C



### Soldering parameters -wave soldering



### Recommended process parameters

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	280° C Maximum
Solder Dwell Time:	2-5 seconds