

Gas Discharge Tube (GDT) Datasheet

● Features

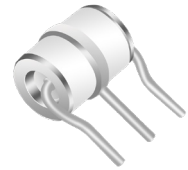
- Excellent response to fast rising transients
- Stable breakdown voltage
- Low capacitance and Insertion Loss
- High insulation resistance
- Dimensions $\Phi 8 \times 10\text{mm}$
- Storage and operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Reliable to Protect Electrostatic Surge
- High Current Handling Capability @8/20 μs ;
- Moisture sensitivity level :Level 1

DC Spark-over Voltage
75V to 600V

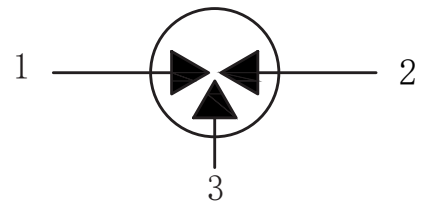
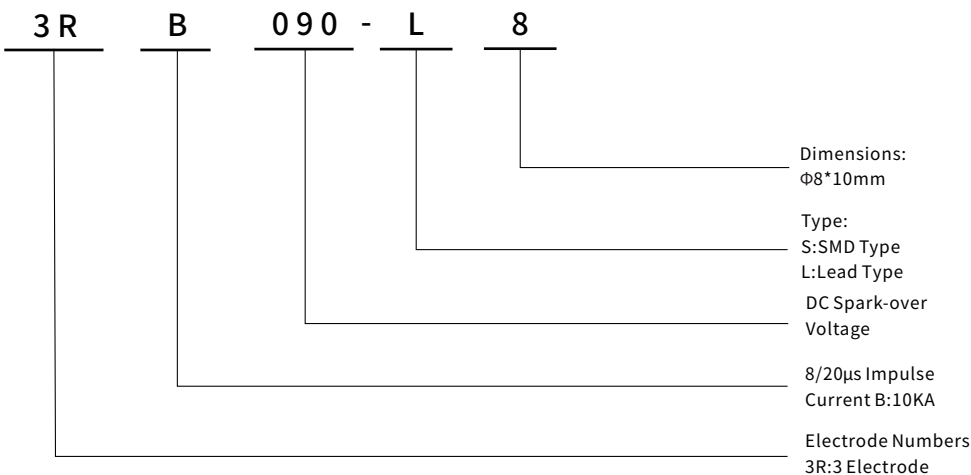
● Applications

- Test equipment
- AC Power
- Power supplies
- Telephone Interface, Line cards
- General Telecommunications equipment

3RB-L8 Series



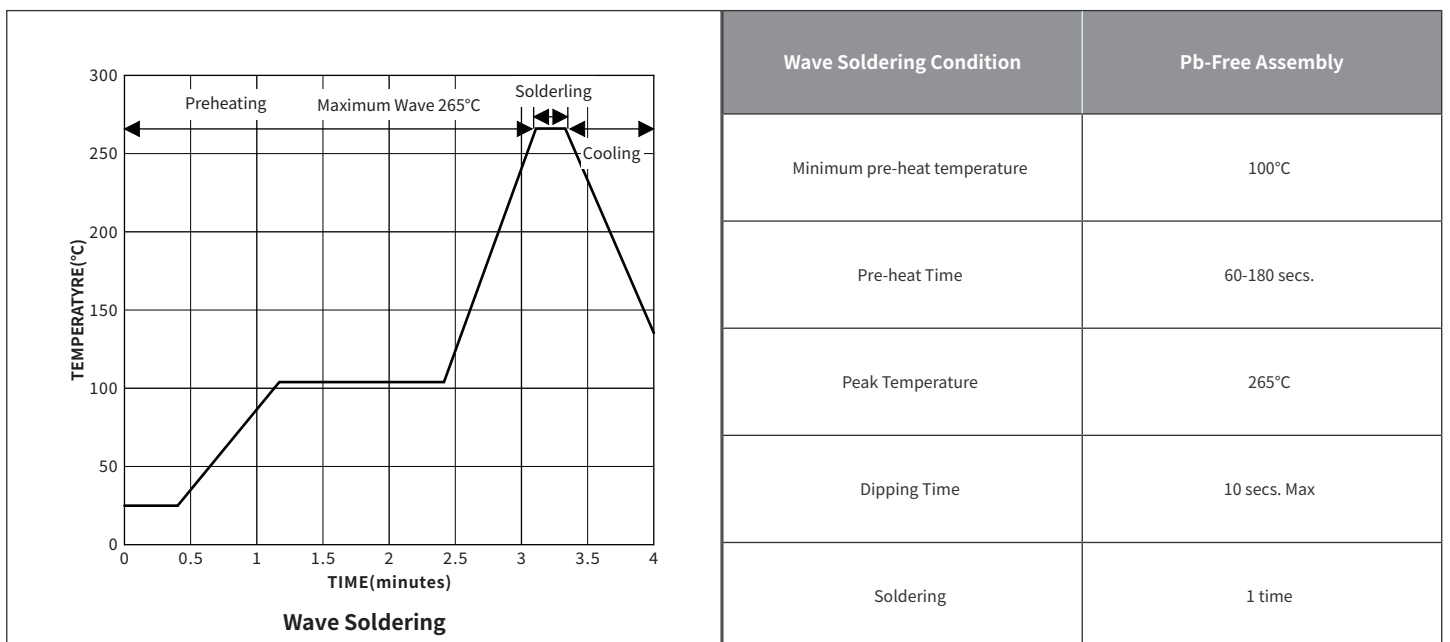
● Part Number Code



● Electrical Characteristics (Ta=25°C Unless otherwise specified)

Part Number	Marking	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current@8/20μs	Alternating Discharge Current @8/20μs	Impulse Life@ 10/1000μs	Minimum Insulation Resistance		Maximum Capacitance
		100V/S	1000V/μs	±5times	50Hz,1sec 10 times	100A	Test Voltage	GΩ	1MHz
		(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)
3RB075-L8	R+O B075-8	75V±30%	600	10	10	300	50	1	1.5
3RB090-L8	R+O B090-8	90V±30%	600	10	10	300	50	1	1.5
3RB150-L8	R+O B150-8	150V±20%	650	10	10	300	100	1	1.5
3RB230-L8	R+O B230-8	230V±20%	700	10	10	300	100	1	1.5
3RB300-L8	R+O B300-8	300V±20%	900	10	10	300	100	1	1.5
3RB350-L8	R+O B350-8	350V±20%	900	10	10	300	100	1	1.5
3RB420-L8	R+O B420-8	420V±20%	1000	10	10	300	100	1	1.5
3RB470-L8	R+O B470-8	470V±20%	1100	10	10	300	100	1	1.5
3RB600-L8	R+O B600-8	600V±20%	1200	10	10	100	100	1	1.5

● Recommended Soldering Conditions



● Electrical Ratings

Items	Test Condition/Description	Requirement
DC Spark-over Voltage	The voltage is measured with voltage ramp $dv/dt=100V/s$	To meet the specified value
Maximum Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with voltage ramp $dv/dt=1000V/\mu s$.	
Impulse Discharge Current	Maximum $8/20\mu s$ surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time.	
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	

● Physical Dimensions

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
C	7.0	7.4	0.275	0.291
D	7.8	8.2	0.307	0.323
T	9.5	10.5	0.374	0.413
W	11.4	13.9	0.449	0.548
L	14.5	15.5	0.571	0.611
d	0.95	1.05	0.037	0.041
S1	4.1	4.7	0.161	0.185
S2	4.1	4.7	0.161	0.185

● Ordering Information

SERIES	SIZE(mm)	DELIVERY MODE	MPQ(pcs)	BOX(pcs)	CARTON(pcs)
3RB-L8 Series	$\Phi 8 \times 10$	Tray	100	500	6,000

● Important Notice

1. This series is designed, manufactured, and sold exclusively for the domestic market (China).
2. This series is NOT UL Certified, and our company does not market or sell this product for use overseas.
3. If the customer exports this series to overseas markets (including but not limited to North America) without our prior written consent, the customer shall assume all risks and liabilities arising from the product's lack of UL certification.