

Gas Discharge Tube (GDT) Datasheet

Features

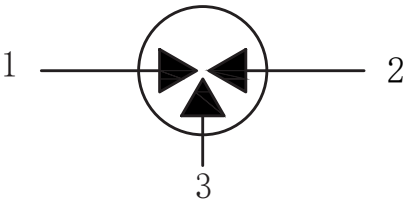
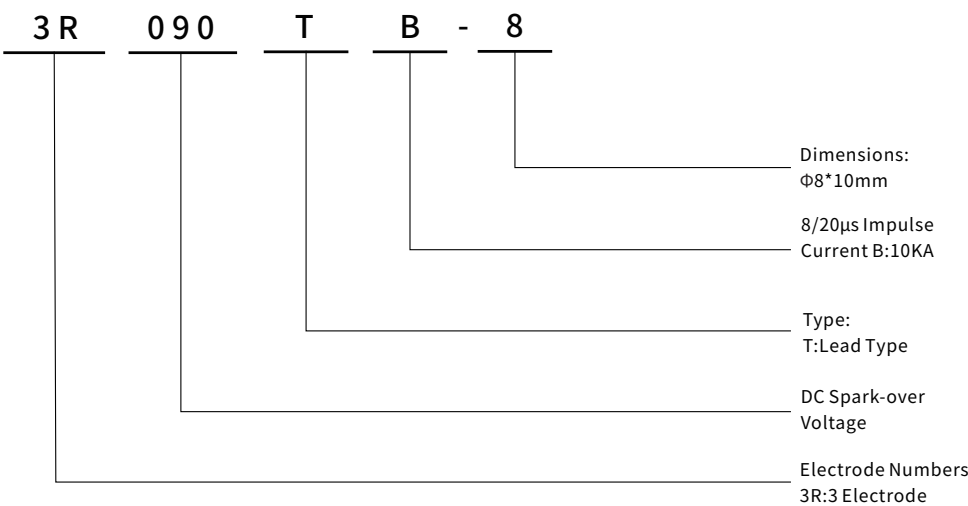
- Excellent response to fast rising transients
- Stable breakdown voltage
- Low capacitance and Insertion Loss
- High insulation resistance
- Dimensions $\Phi 8 \times 10\text{mm}$
- Storage and operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Reliable to Protect Electrostatic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

DC Spark-over Voltage
75V to 800V

Applications

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

Part Number Code



Safety Certification

UL: E465335

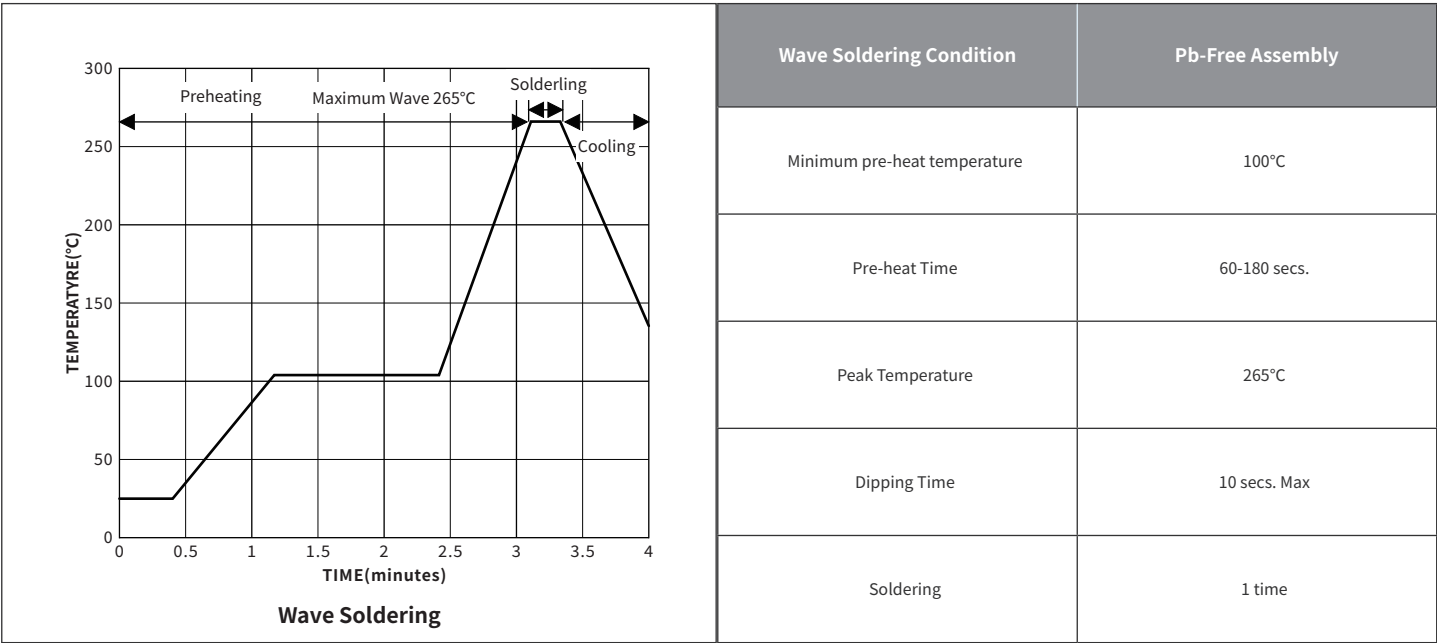
3-Electrode Gas Discharge Tubes, Model(s):

3RxxxTB-8 where xxx is 075, 090, 150, 230, 350, 400, 420, 470, or 600.

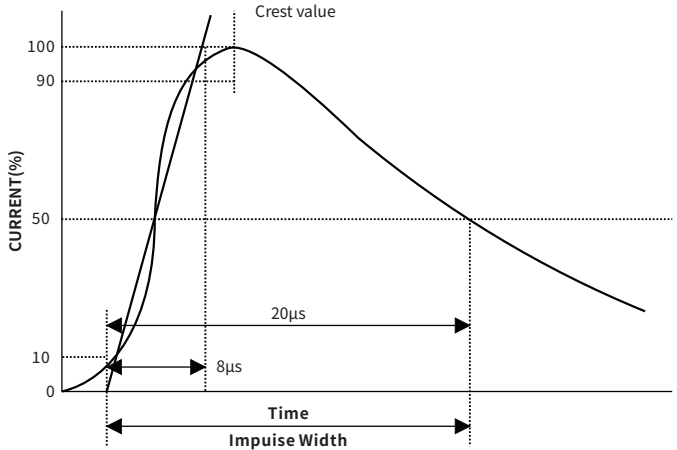
● Electrical Characteristics (Ta=25°C Unless otherwise specified)

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)
3R075TB-8	R+O 075B-8	75±20%	600	10	10	300	25	1	1.5
3R090TB-8	R+O 090B-8	90±20%	600	10	10	300	50	1	1.5
3R150TB-8	R+O 150B-8	150±20%	600	10	10	300	100	1	1.5
3R200TB-8	R+O 200B-8	200±20%	700	10	10	300	100	1	1.5
3R230TB-8	R+O 230B-8	230±20%	700	10	10	300	100	1	1.5
3R250TB-8	R+O 250B-8	250±20%	700	10	10	300	100	1	1.5
3R350TB-8	R+O 350B-8	350±20%	900	10	10	300	100	1	1.5
3R400TB-8	R+O 400B-8	400±20%	950	10	10	300	100	1	1.5
3R420TB-8	R+O 420B-8	420±20%	950	10	10	300	250	1	1.5
3R470TB-8	R+O 470B-8	470±20%	1000	10	10	300	250	1	1.5
3R600TB-8	R+O 600B-8	600±20%	1200	10	10	300	250	1	1.5
3R800TB-8	R+O 800B-8	800±20%	1400	10	10	300	250	1	1.5

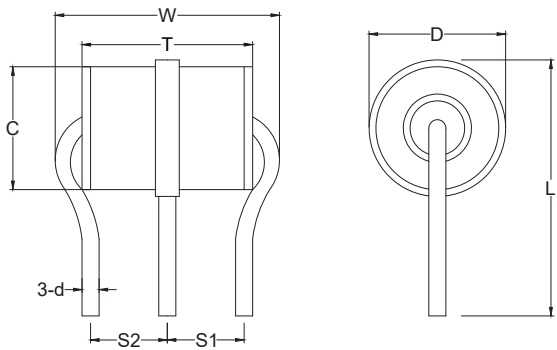
● Recommended Soldering Conditions



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

	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	9.7	10.3	0.382	0.406
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)
3R-8	$\Phi 8 \times 10$	PVC TRAY	100	500