

Gas Discharge Tube (GDT) Datasheet

Features

- Excellent response to fast rising transients
- Stable breakdown voltage
- Low capacitance and Insertion Loss
- High insulation resistance
- Dimensions 5*7.6mm
- Storage and operating temperature: -40°C ~ +85°C
- Reliable to Protect Electrostatic Surge
- High Current Handling Capability @8/20μs;
- Moisture sensitivity level :Level 1

DC Spark-over Voltage
75V to 600V

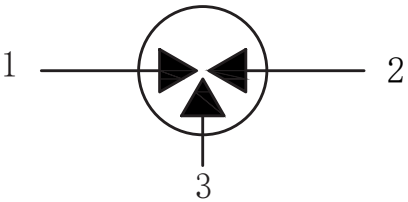
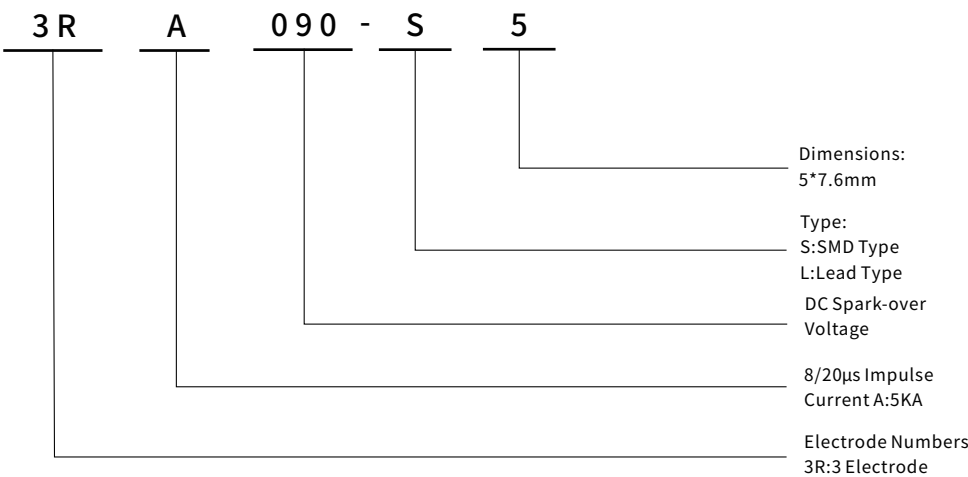
Applications

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

3RA-S5



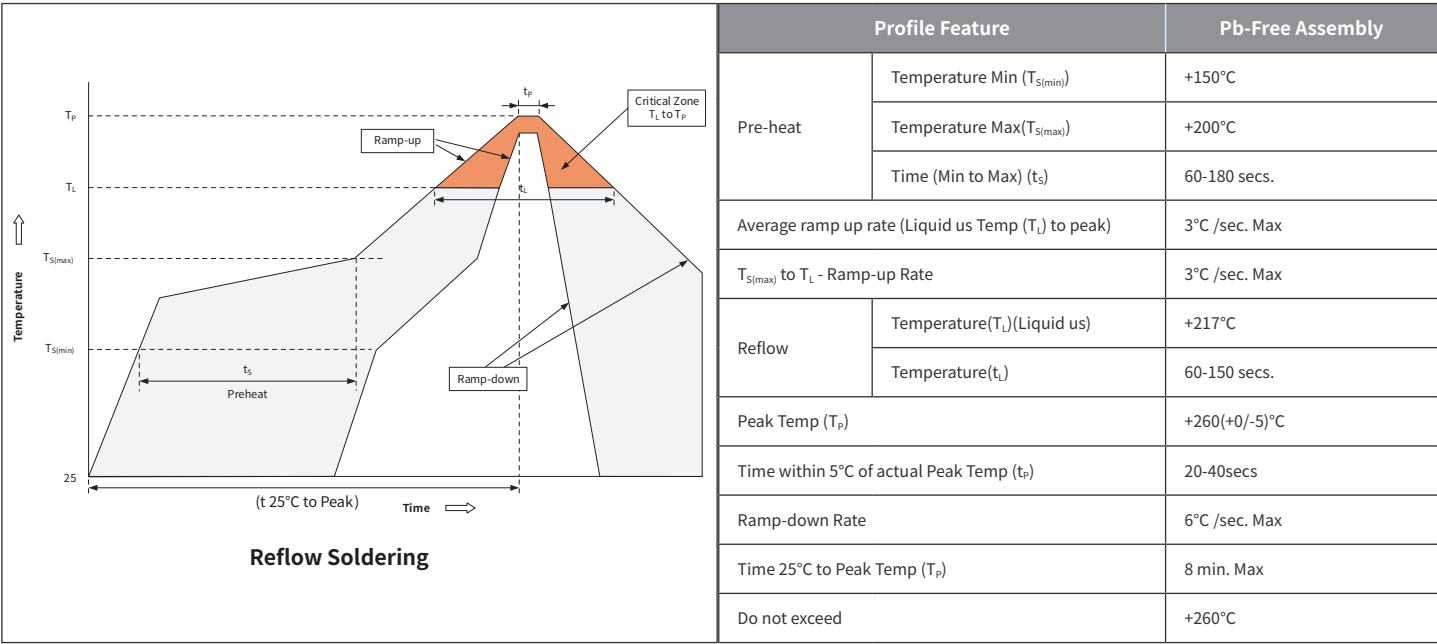
Part Number Code



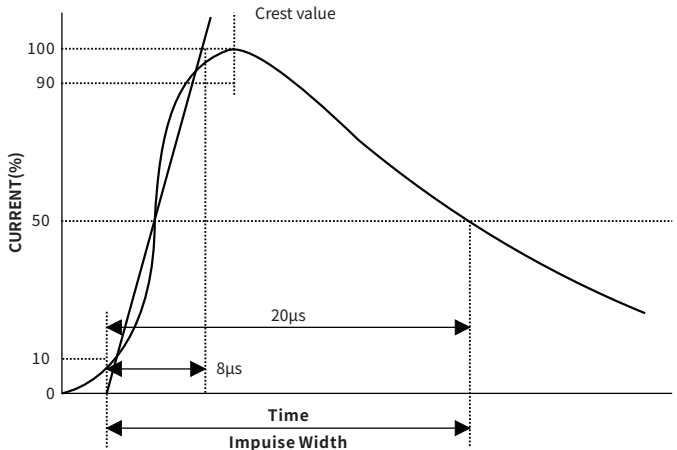
● Electrical Characteristics (Ta=25°C Unless otherwise specified)

Part Number	Marking	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current@8/20μs	Alternating Discharge Current	Impulse Life@ 10/1000μs	Minimum Insulation Resistance		Maximum Capacitance
		100V/S	1000V/μs	±5times	50Hz,1sec	100A	Test Voltage	GΩ	1MHz
		(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)
3RA075-S5	R+O A075-5	75V±30%	600	5	5	100	50	1	1
3RA090-S5	R+O A090-5	90V±30%	600	5	5	100	50	1	1
3RA150-S5	R+O A150-5	150V±20%	650	5	5	100	100	1	1
3RA230-S5	R+O A230-5	230V±20%	700	5	5	100	100	1	1
3RA300-S5	R+O A300-5	300V±20%	900	5	5	100	100	1	1
3RA350-S5	R+O A350-5	350V±20%	900	5	5	100	100	1	1
3RA420-S5	R+O A420-5	420V±20%	1000	5	5	100	100	1	1
3RA470-S5	R+O A470-5	470V±20%	1100	5	5	100	100	1	1
3RA600-S5	R+O A600-5	600V±20%	1200	5	5	100	100	1	1

● Recommended Soldering Conditions

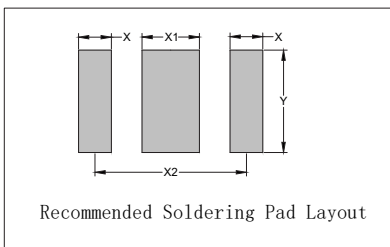
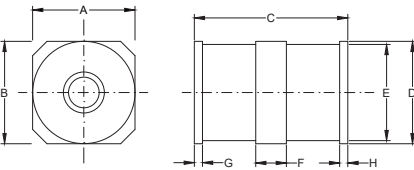


● Electrical Ratings

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 & Recommended Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.8	5.2	0.189	0.205
B	4.8	5.2	0.189	0.205
C	7.3	7.9	0.287	0.311
D	4.8	5.2	0.189	0.205
E	4.5	4.9	0.177	0.193
F	1.4	1.8	0.055	0.071
G	0.3	0.5	0.012	0.020
H	0.3	0.5	0.012	0.020
X	1.6		0.063	
X1	3.0		0.118	
X2	7.6		0.299	
Y	5.2		0.205	



Recommended Soldering Pad Layout

● Ordering Information

SERIES	SIZE(mm)	DELIVERY MODE	MPQ(pcs)	BOX(pcs)	CARTON(pcs)
3RA-S5 Series	5×7.6	13"REEL	1,000	2,000	10,000

● Packaging Information

Symbol	Dimensions(mm)	
	Millimeters	Inches
W	16±0.3	0.63±0.012
A0	5.4±0.1	0.213±0.004
B0	8.4±0.1	0.331±0.004
K0	5.3±0.1	0.209±0.004
P	8.0±0.1	0.315±0.004
F	7.5±0.1	0.295±0.004
E	1.75±0.1	0.069±0.004
D	1.5±0.1	0.059±0.004
P0	4.0±0.1	0.157±0.004
P2	2.0±0.1	0.079±0.004
T	0.4±0.1	0.016±0.004

● 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.
4. By purchasing, using, or handling this product, the customer is deemed to have fully acknowledged and agreed to all terms stated in this notice.