Data Sheet

Gas Discharge Tube

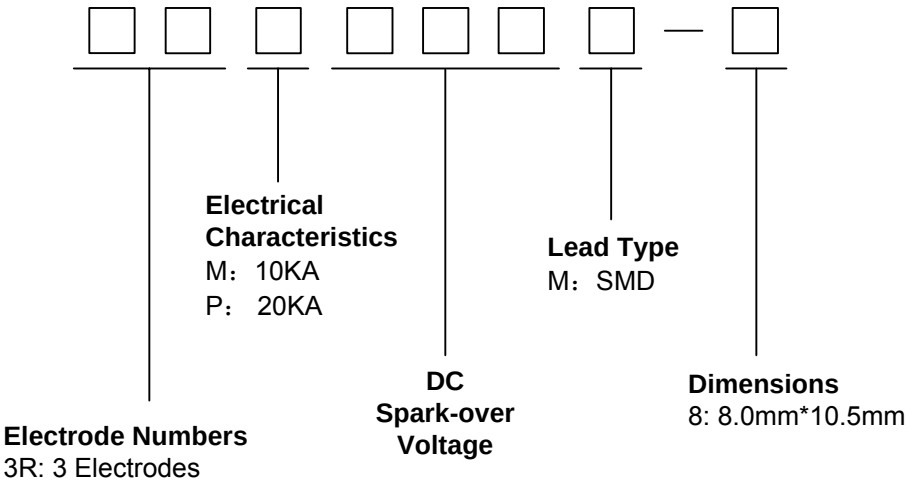
Features

- 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: 8.0mm*10.5mm
- Storage and operational temperature: -40℃ ~ +85℃
- Meets MSL level 1, per J-STD-020

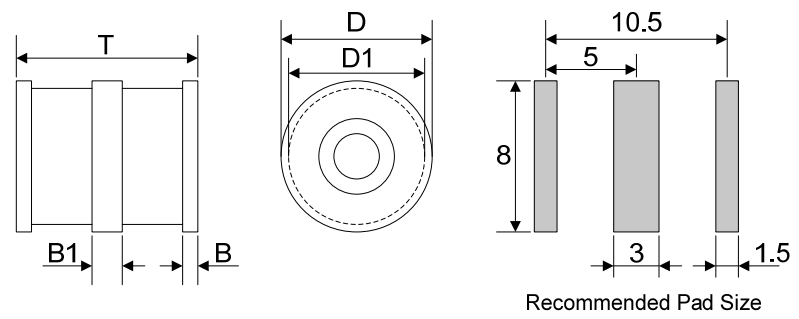
Applications

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

Part Number Code



Dimensions



Items	Dimension (mm)	
	Spec.	Tolerance
D	8.0	+0.2, -0.8
D1	7.6	±0.2
T	10.5	±0.5
B	0.5	±0.1
B1	2.0	±0.2

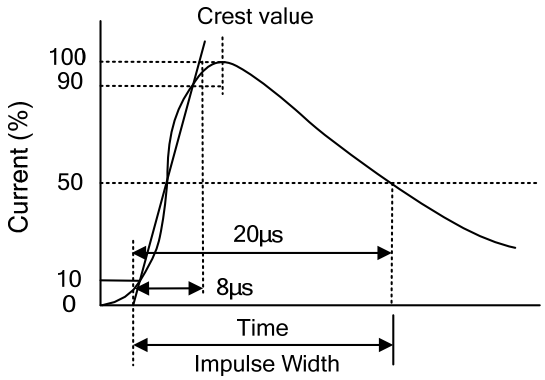
Electrical Characteristics

Part Number	Type ①	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current ②	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
		100V/s	1000V/μs	8/20μs 10times	50Hz,1sec	10/1000μs 100A	Test Voltage	(GΩ)	1MHz	
		(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)	
3RM075M-8	SD	75±20%	700	10	10	300	25	1.0	2.0	3RM075-8
3RM090M-8	SD	90±20%	700	10	10	300	50	1.0	2.0	3RM090-8
3RM150M-8	SD	150±20%	700	10	10	300	100	1.0	2.0	3RM150-8
3RM200M-8	SD	200±20%	700	10	10	300	100	1.0	2.0	3RM200-8
3RM230M-8	SD	230±20%	700	10	10	300	100	1.0	2.0	3RM230-8
3RM350M-8	SD	350±20%	850	10	10	300	100	1.0	2.0	3RM350-8
3RM400M-8	SD	400±20%	850	10	10	300	100	1.0	2.0	3RM400-8
3RM470M-8	SD	470±20%	950	10	10	300	250	1.0	2.0	3RM470-8
3RM600M-8	SD	600±20%	1300	10	10	300	250	1.0	2.0	3RM600-8
3RM800M-8	SD	800±20%	1500	10	10	300	250	1.0	2.0	3RM800-8
3RP075M-8	SD	75±20%	700	20	20	300	25	1.0	2.0	3RP075-8
3RP090M-8	SD	90±20%	700	20	20	300	50	1.0	2.0	3RP090-8
3RP150M-8	SD	150±20%	700	20	20	300	100	1.0	2.0	3RP150-8
3RP200M-8	SD	200±20%	700	20	20	300	100	1.0	2.0	3RP200-8
3RP230M-8	SD	230±20%	700	20	20	300	100	1.0	2.0	3RP230-8
3RP350M-8	SD	350±20%	850	20	20	300	100	1.0	2.0	3RP350-8
3RP400M-8	SD	400±20%	850	20	20	300	100	1.0	2.0	3RP400-8
3RP470M-8	SD	470±20%	950	20	20	300	250	1.0	2.0	3RP470-8
3RP600M-8	SD	600±20%	1300	20	20	300	250	1.0	2.0	3RP600-8
3RP800M-8	SD	800±20%	1500	20	20	300	250	1.0	2.0	3RP800-8

Notes：① Specific code by request.

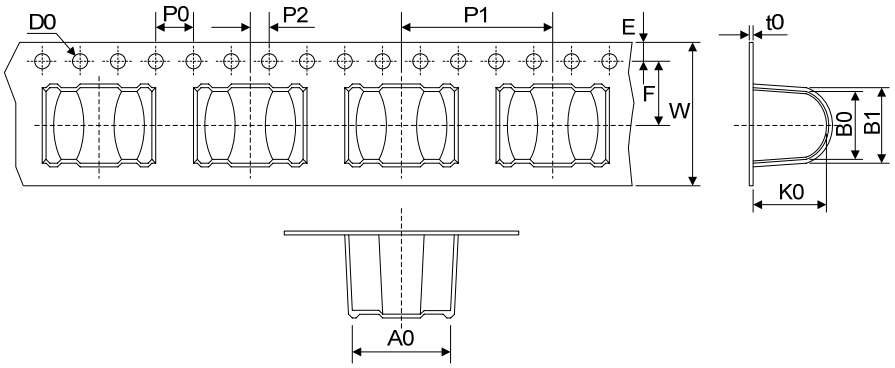
② Impulse discharge current for GDT is the total current equally divided between each line to ground.

Electrical Ratings

Items	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 applying a waveform of 8/20μs that can be applied across the terminals of the gas tube without causing the gas tube to change more than ±25% from its initial measured DC breakdown voltage. Dwell time between pulses is 3 minutes. 	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. 10 times. Intervals: 3 min. DC breakdown voltage may not change more than ±25% 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 each other terminal. Test frequency: 1MHz	

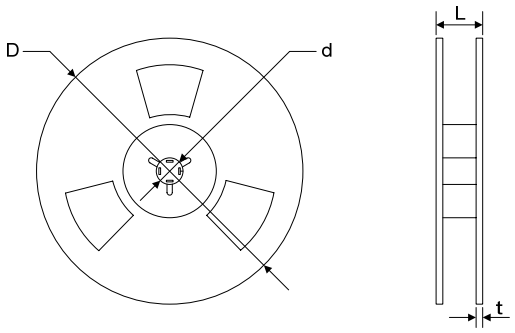
Packaging

Tape



Items	Dimension (mm)	
	Spec.	Tolerance
W	16.00	±0.20
P0	4.00	±0.10
P1	16.00	±0.10
P2	2.00	±0.10
D0	1.55	±0.05
E	1.75	±0.10
F	7.50	±0.10
A0	11.60	±0.10
K0	8.90	±0.10
B0	8.60	±0.10
B1	10.00	±0.10
t0	0.50	±0.05

Reel



D	330.00	±1.00
d	13.00	±0.50
L	20.00	±0.50
t	2.00	±0.20

Quantity: 300pcs