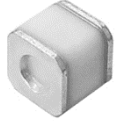


## Gas Discharge Tube (GDT) Data Sheet

### Features

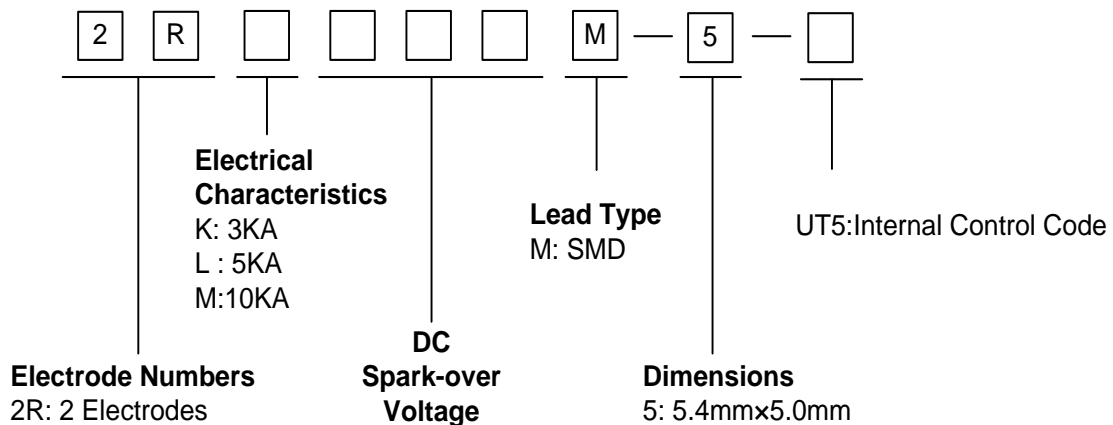
- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs.
- Stable breakdown voltage.
- High insulation resistance.
- Low capacitance (≤1.0pF)
- High holdover voltage
- Large absorbing transient current capability.
- Micro-Gap Design
- Size: 5.4mm\*5.0mm
- Storage and operational temperature: -40°C ~ +90°C
- Meets MSL level 1, per J-STD-020
- Safety certification: E244458 & E327997



### Applications

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

### Part Number Code



### Marking

XXX: Device Marking Code

**Dimensions**

	Dimension (mm)		
	Symbol		
		Spec.	Tolerance
	D	5.4	±0.2
T	5.0	±0.2	
B	0.5	±0.2	

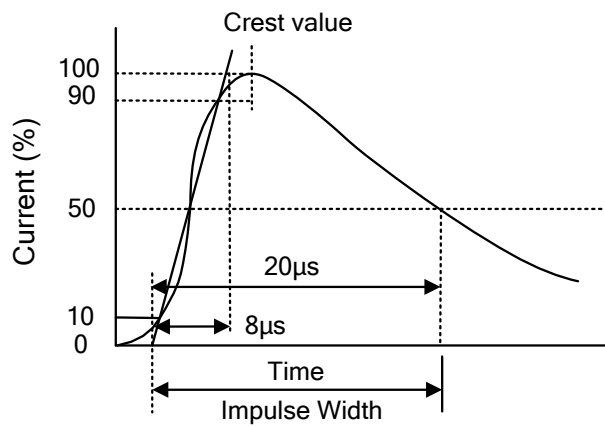
**Electrical Characteristics**

Part Number	Type ①	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Alternating Discharge Current	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
		100V/s	1000V/μs	8/20μs ±5times	50Hz, 1sec	Test Voltage	(GΩ)	1MHz	
		(V)	(V)	(KA)	(A)	DC(V)		(pF)	
2RM075M-5	UT5	75±20%	650	10.0	5.0	25	1.0	1.0	075
2RM090M-5	UT5	90±20%	700	10.0	5.0	50	1.0	1.0	090
2RM150M-5	UT5	150±20%	700	10.0	5.0	50	1.0	1.0	150
2RM230M-5	UT5	230±20%	750	10.0	5.0	100	1.0	1.0	230
2RM250M-5	UT5	250±20%	750	10.0	5.0	100	1.0	1.0	250
2RL300M-5	UT5	300±20%	800	5.0	5.0	100	1.0	1.0	300
2RL350M-5	UT5	350±20%	900	5.0	5.0	100	1.0	1.0	350
2RL400M-5	UT5	400±20%	1000	5.0	5.0	100	1.0	1.0	400
2RL470M-5	UT5	470±20%	1100	5.0	5.0	250	1.0	1.0	470
2RL600M-5	UT5	600±20%	1500	5.0	5.0	250	1.0	1.0	600
2RL800M-5	UT5	800±20%	1800	5.0	5.0	250	1.0	1.0	800
2RL1000M-5	UT5	1000±20%	2000	5.0	5.0	500	1.0	1.0	102
2RK1200M-5	UT5	1200±20%	2400	3.0	3.0	500	1.0	1.0	122
2RK1500M-5	UT5	1500±20%	2800	3.0	3.0	500	1.0	1.0	152

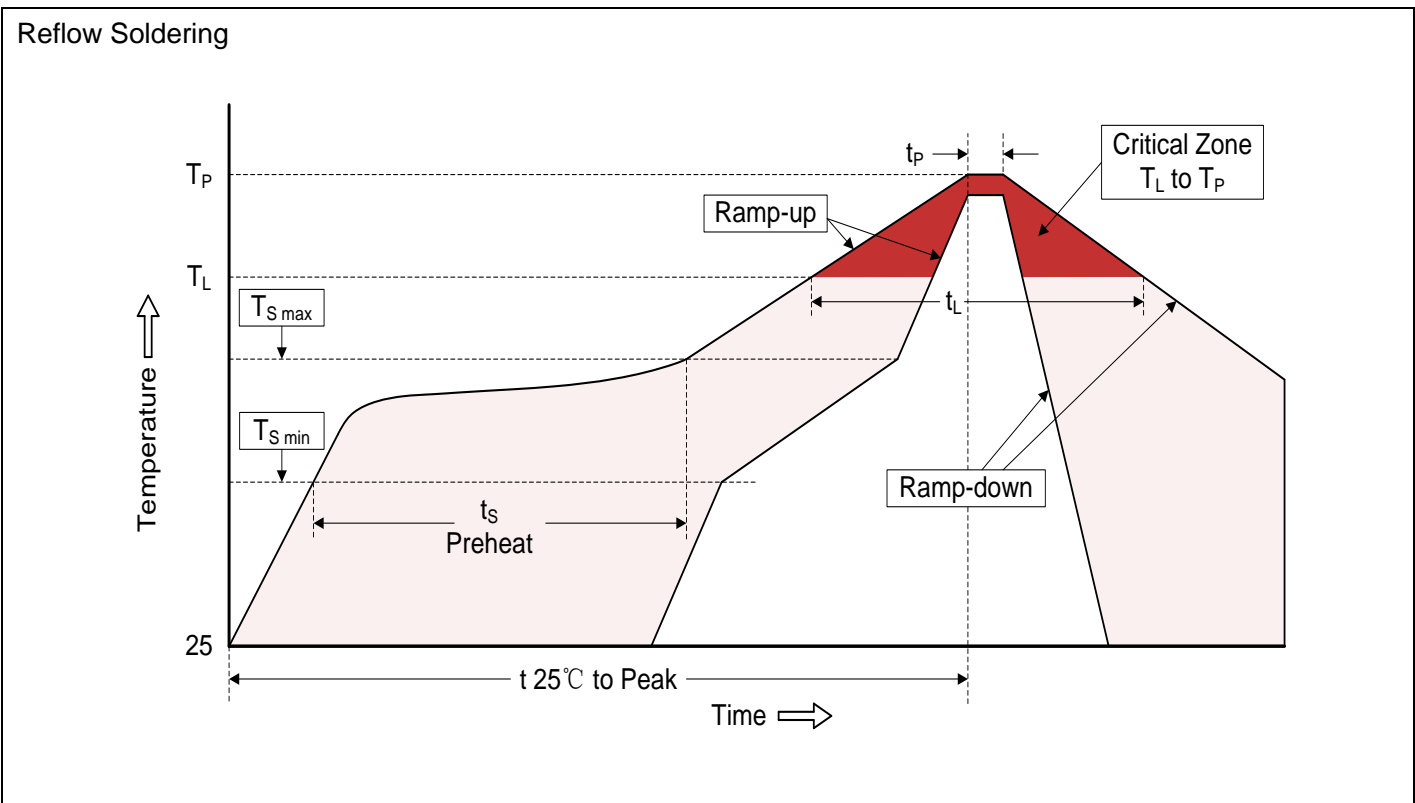
Notes : ① Specific code by request.

**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/μs.	

<p>Impulse Discharge Current</p>	<p>Maximum 8/20<math>\mu</math>s surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time.</p> 	
<p>Alternating Discharge Current</p>	<p>Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.</p>	
<p>Insulation Resistance</p>	<p>The resistance of gas tube shall be measured between two electrodes.</p>	
<p>Capacitance</p>	<p>The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz</p>	

**Recommended Soldering Conditions**

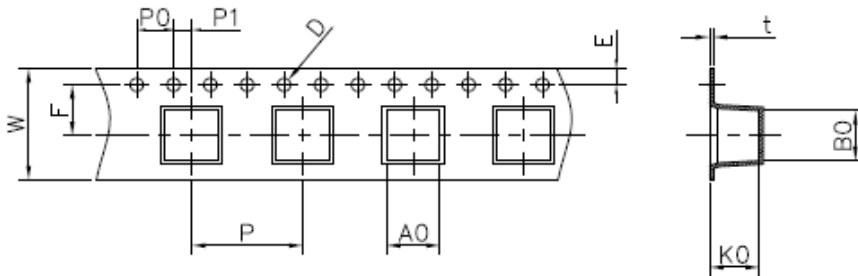


Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate ( $T_L$ to $T_P$ )	3°C/second max.
Preheat -Temperature Min ( $T_{S\ min}$ ) -Temperature Max ( $T_{S\ max}$ ) -Time (min to max) (ts)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to $T_L$ -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature ( $T_L$ ) -Time (t <sub>L</sub> )	217°C 60-150 seconds
Peak Temperature ( $T_P$ )	260°C
Time within 5°C of actual Peak Temperature (t <sub>p</sub> )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

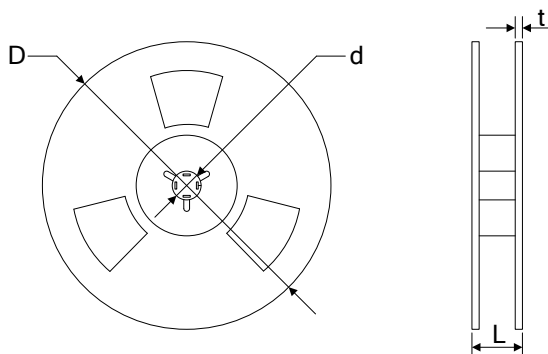
Packaging

Tape



Symbol	Dimension (mm)	
	Spec.	Tolerance
W	12.00	±0.20
P0	4.00	±0.10
P	12.00	±0.10
P1	2.00	±0.10
D	1.55	±0.1
E	1.75	±0.10
F	5.50	±0.10
A0	5.80	±0.10
B0	5.40	±0.10
K0	5.80	±0.10
t	0.50	±0.10

Reel



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

Quantity: 800pcs