Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2RE-2-HT series

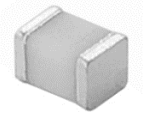
RoHS compliant & free



Product specification– June 01, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

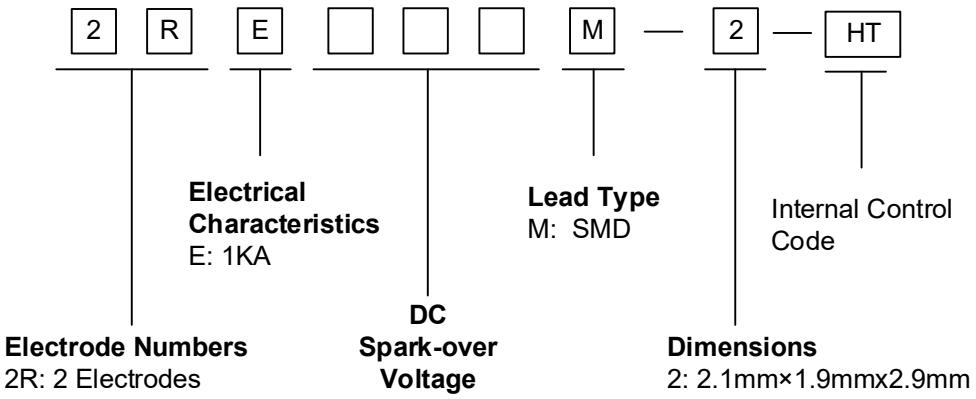


- High insulation resistance
- Low capacitance (≤0.5pF)
- 1KA 8/20μs maximum surge current capacity in accordance with IEC61000-4-5
- Surface mounted gas arrester
- Micro-Gap Design
- Size：2.1mm*1.9mm*2.9mm
- Operating temperature: -40℃ ~ +125℃
- Meets MSL level 1, per J-STD-020
- Safety certification: UL

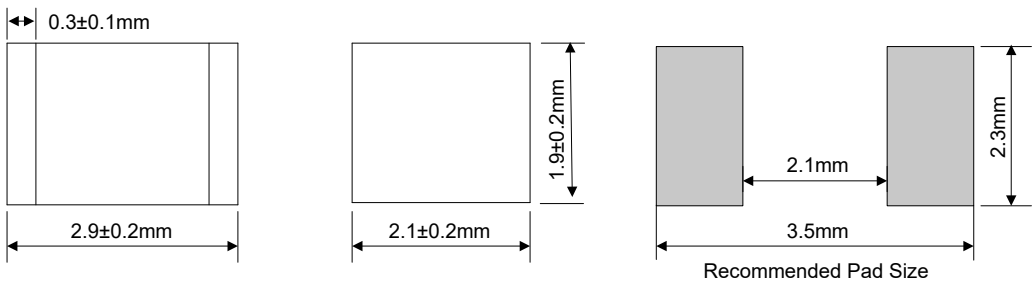
Applications

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

Part Number Code



Dimensions



Electrical Characteristics

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Withstanding Voltage Capacity	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	10/700μs 10times	Test Voltage	(GΩ)	(1MHz)	
	(V)	(V)	(KA)	(KV)	DC(V)		(pF)	
2RE090M-2-HT	90±30%	700	1.0	4.0	50	1.0	0.5	None
2RE150M-2-HT	150±30%	650	1.0	4.0	100	1.0	0.5	None
2RE200M-2-HT	200±30%	650	1.0	4.0	100	1.0	0.5	None
2RE230M-2-HT	230±30%	700	1.0	4.0	100	1.0	0.5	None
2RE300M-2-HT	300±30%	900	1.0	4.0	100	1.0	0.5	None
2RE350M-2-HT	350±30%	900	1.0	4.0	100	1.0	0.5	None
2RE400M-2-HT	400±30%	1000	1.0*	4.0	100	1.0	0.5	None
2RE420M-2-HT	420±30%	1000	1.0*	4.0	100	1.0	0.5	None
2RE470M-2-HT	470±30%	1100	1.0*	4.0	100	1.0	0.5	None
2RE500M-2-HT	500±30%	1300	1.0*	4.0	100	1.0	0.5	None

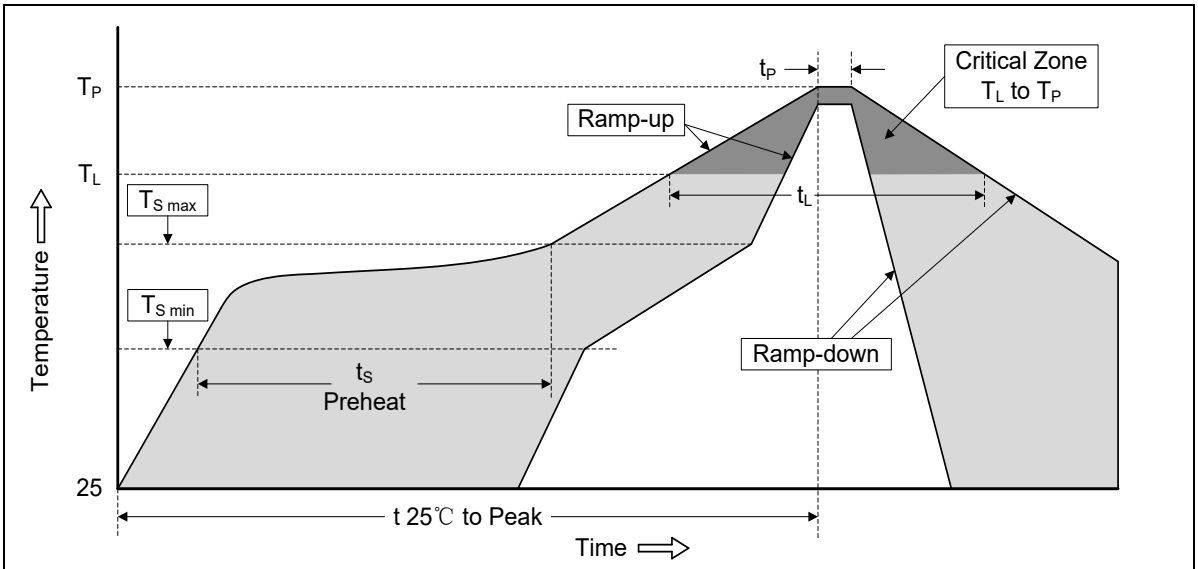
* Measured with an 8/20μs waveform, 1KA 1time or 0.5KA 10times

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.	
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	
Impulse Discharge Current	Maximum 8/20μs surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time.	

Recommended Soldering Conditions

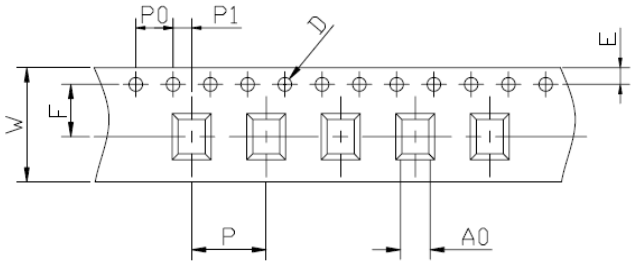
Reflow Soldering



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

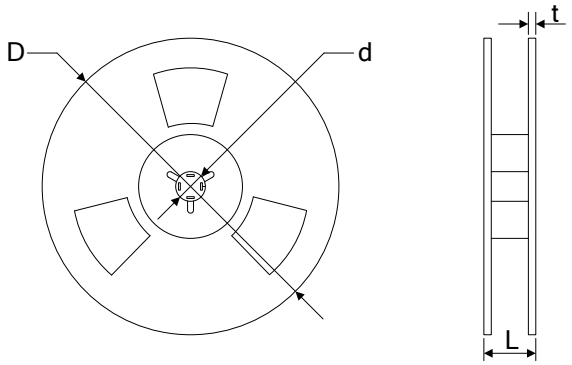
Packaging

Tape



Items	Dimension (mm)	
	Spec.	Tolerance
W	12.00	±0.20
A0	2.40	±0.10
B0	3.20	±0.10
K0	2.20	±0.10
E	1.75	±0.10
F	5.50	±0.10
D	1.55	±0.10
P	8.00	±0.10
P0	4.00	±0.10
P1	2.00	±0.10
t	0.40	±0.10

Reel



D	300.00	±1.00
d	13.00	±0.50
L	16.00	±0.50
t	2.00	±0.20

Quantity: 2500pcs

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