

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-4x5 series

RoHS compliant & free



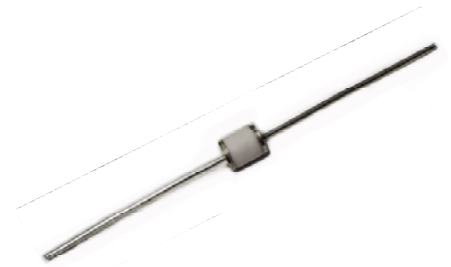
Product specification— July 12, 2023 V.1



Gas Discharge Tube (GDT) Data Sheet

Features

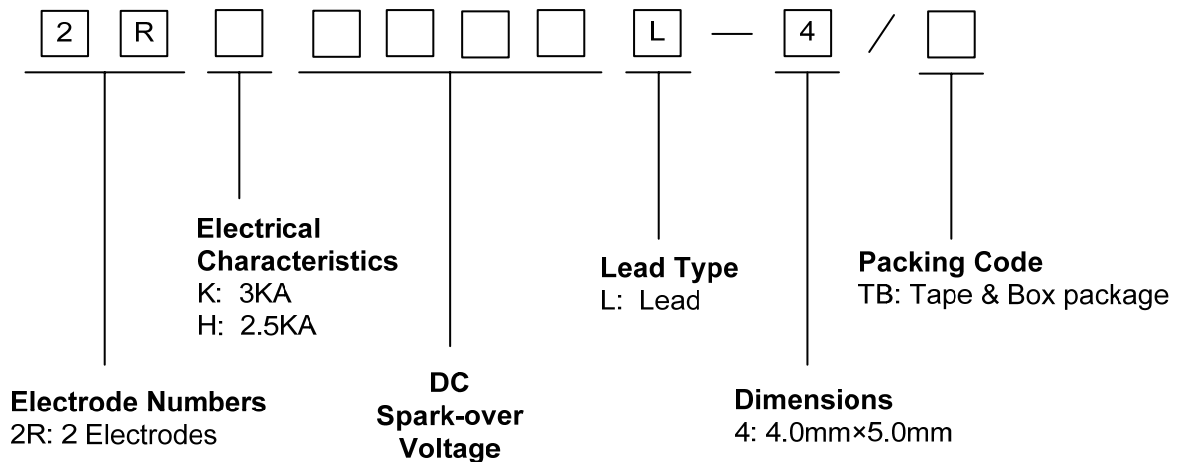
- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1.0pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 4.0mm*5.0mm
- Storage and operating temperature: -40°C ~ +125°C
- 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



Ordering Code	Lead type	Packing
2RKXXL-4/TB 2RHXXL-4/TB	Lead	Tape & Box

Dimensions

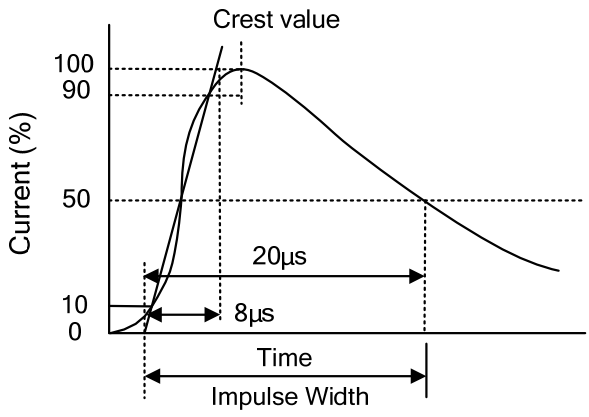
L Type	Symbol	Dimension (mm)	
		Spec.	Tolerance
	D	4.0	±0.3
	T	5.0	±0.3
	d	0.6	±0.1
	L	30.0	Max.

Electrical Characteristics

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	8/200μs 100A	Test Voltage	(GΩ)	1MHz	
	(V)	(V)	(KA)	(times)	DC(V)		(pF)	
2RK090L-4	90±20%	700	3.0	300	50	1.0	1.0	None
2RK120L-4	120±20%	800	3.0	300	50	1.0	1.0	None
2RK150L-4	150±20%	800	3.0	300	100	1.0	1.0	None
2RK200L-4	200±20%	850	3.0	300	100	1.0	1.0	None
2RK250L-4	250±20%	900	3.0	300	100	1.0	1.0	None
2RK300L-4	300±20%	900	3.0	300	100	1.0	1.0	None
2RK350L-4	350±20%	1000	3.0	300	100	1.0	1.0	None
2RK400L-4	400±20%	1100	3.0	300	100	1.0	1.0	None
2RK500L-4	500±20%	1200	3.0	300	250	1.0	1.0	None
2RK600L-4	600±20%	1500	3.0	300	250	1.0	1.0	None
2RK800L-4	800±20%	1700	3.0	300	250	1.0	1.0	None

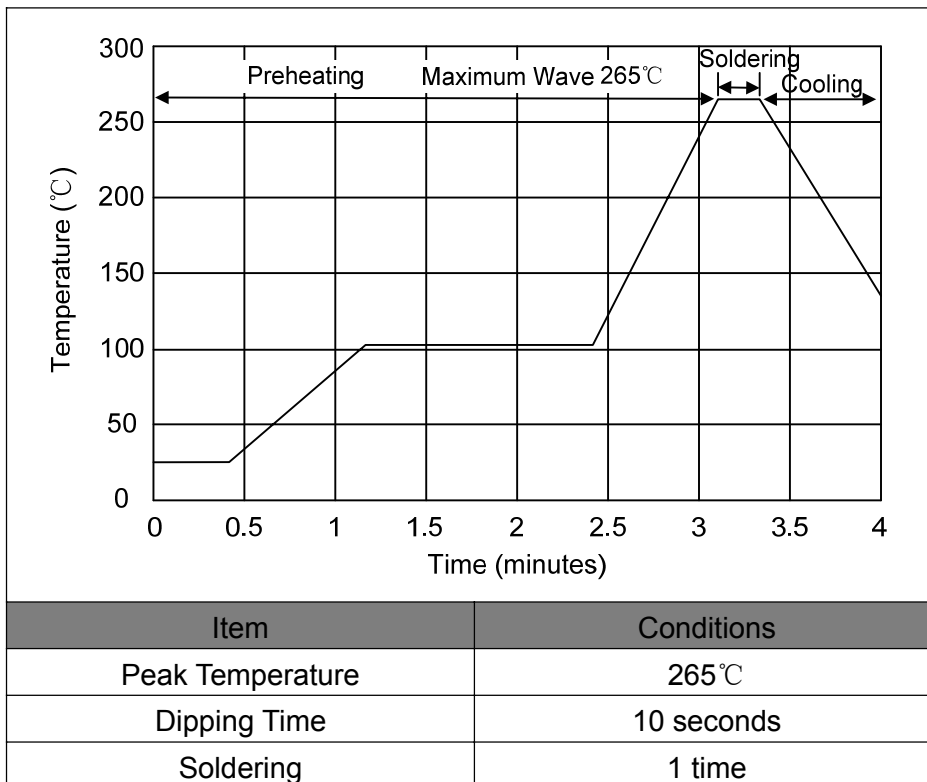
Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	AC Withstanding Voltage	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	8/200μs 100A	Test Voltage	(GΩ)	1MHz		
	(V)	(V)	(KA)	(times)	DC(V)		(pF)		
2RH1000L-4	1000±20%	2000	2.5	300	500	1.0	1.0	-	None
2RH1200L-4	1200±20%	2200	2.5	300	500	1.0	1.0	-	None
2RH1500L-4	1500±20%	2400	2.5	300	500	1.0	1.0	-	None
2RH2000L-4	2000±20%	3500	2.5	300	500	1.0	1.0	-	None
2RH2500L-4	2500±20%	3800	2.5	300	500	1.0	1.0	AC1250V,3s	None
2RH3000L-4	3000±20%	4500	2.5	300	1000	1.0	1.0	AC1500V, 3s	None
2RH3600L-4	3600±20%	5000	2.5	300	1000	1.0	1.0	AC1800V, 3s	None

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. 	
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	

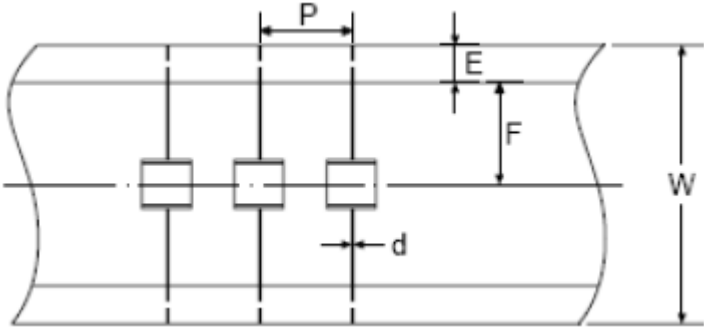
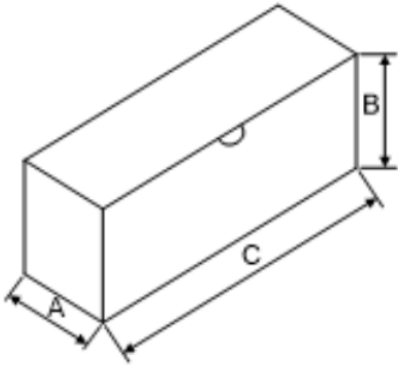
Recommended Soldering Conditions

Wave Soldering



Packaging

Axial Packing

<p>Tape</p> 	Dimension (mm)		
	Symbol	Spec.	Tolerance
	P	5.0	±0.5
	W	65.0	±2.0
	E	6.0	±1.0
	F	26.5	±1.0
	d	0.6	±0.05
<p>Inner Box</p> 	A	75.0	±5.0
	B	114.0	±5.0
	C	250.0	±5.0
	Quantity: 2000pcs		

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