

DATA SHEET

GAS DISCHARGE TUBES TELEPHONE INTERFACE

2R-6x7 series

RoHS compliant & free



Product specification— September 17, 2021 V.1



Gas Discharge Tube (GDT) Data Sheet

Features

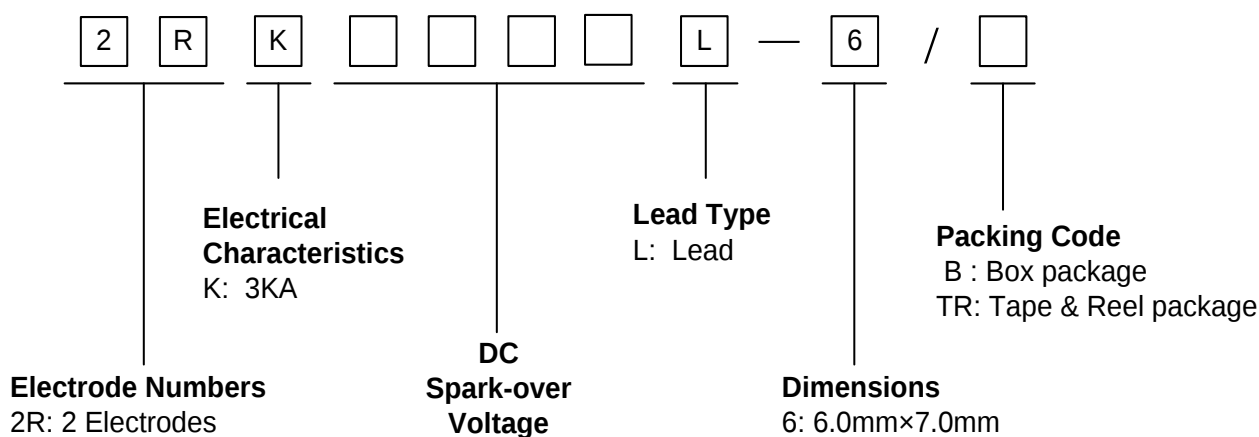
- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs.
- Stable breakdown voltage.
- High insulation resistance.
- Low capacitance ($\leq 0.5\text{pF}$)
- High holdover voltage
- Large absorbing transient current capability.
- Micro-Gap Design
- Size: 6.0mm*7.0mm
- Storage and operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- 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
2RKXXXL-6/B	Lead	Box(Tray)
2RKXXXL-6/TR	Lead	Tape & Reel

Marking



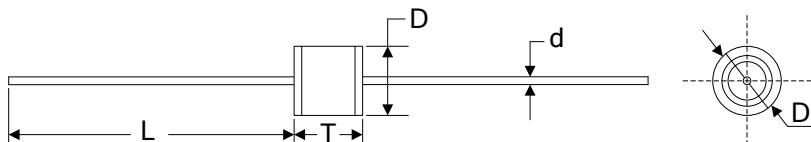
: BrightKing Logo

2RK1000-6 : Device Marking Code

XXXX : Internal Control Code

Dimensions

L Type

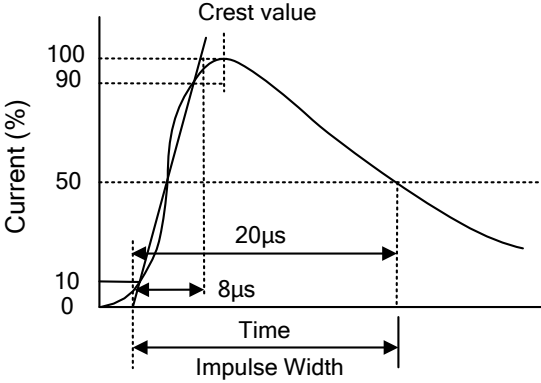


Symbol	Dimension (mm)	
	Spec.	Tolerance
D	6.0	+0.3, -0.5
T	7.0	+0.3, -0.5
d	0.8	±0.1
L	30.0	Max.

Electrical Characteristics

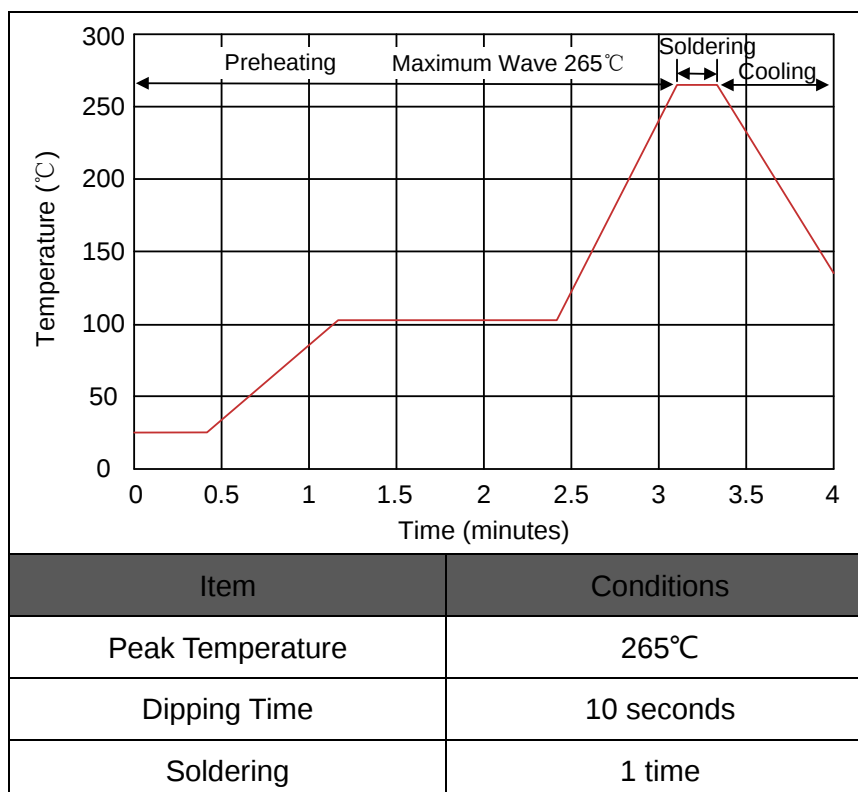
Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	AC Withstanding Voltage	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	8/20μs 100A	Test Voltage	(GΩ)	1MHz		
	(V)	(V)	(KA)	(times)	DC(V)		(pF)		
2RK1000L-6	1000±20%	2000	3.0	300	500	1.0	0.5	-	2RK1000-6
2RK1200L-6	1200±20%	2300	3.0	300	500	1.0	0.5	-	2RK1200-6
2RK1400L-6	1400±20%	2500	3.0	300	500	1.0	0.5	-	2RK1400-6
2RK1500L-6	1500±20%	2600	3.0	300	500	1.0	0.5	-	2RK1500-6
2RK1600L-6	1600±20%	2700	3.0	300	500	1.0	0.5	-	2RK1600-6
2RK2000L-6	2000±20%	3000	3.0	300	500	1.0	0.5	-	2RK2000-6
2RK2500L-6	2500±20%	3600	3.0	300	1000	1.0	0.5	AC1250V,1min	2RK2500-6
2RK2700L-6	2700±20%	3800	3.0	300	1000	1.0	0.5	AC1250V,1min	2RK2700-6
2RK3000L-6	3000±20%	4200	3.0	300	1000	1.0	0.5	AC1500V,1min	2RK3000-6
2RK3500L-6	3500±20%	4600	3.0	300	1000	1.0	0.5	AC1800V,1min	2RK3500-6
2RK3600L-6	3600±20%	4700	3.0	300	1000	1.0	0.5	AC1800V,1min	2RK3600-6

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 the two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time. 	
Insulation Resistance	The resistance of gas tube shall be measured between the two electrodes.	
Capacitance	The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz	

Recommended Soldering Conditions

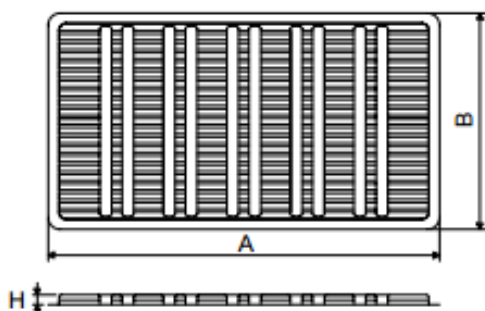
Wave Soldering



Packaging

Axial Packing (Box)

Skin packing



Symbol

Dimension (mm)

Spec.

Tolerance

A

267.0

 ± 2.0

B

146.0

 ± 2.0

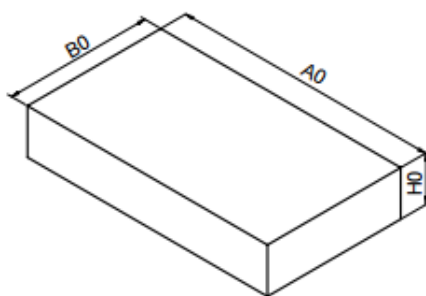
H

7.2

 ± 1.0

Quantity: 100pcs

Inner box



A0

272.0

 ± 2.0

B0

152.0

 ± 2.0

H0

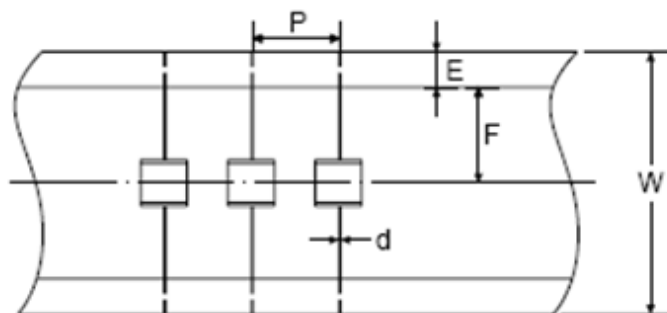
42.0

 ± 2.0

Quantity: 500pcs

Axial Packing (Tape & Reel)

Tape



Symbol

Dimension (mm)

Spec.

Tolerance

P

10.0

 ± 0.5

W

65.0

 ± 1.0

E

6.0

 ± 0.5

F

26.5

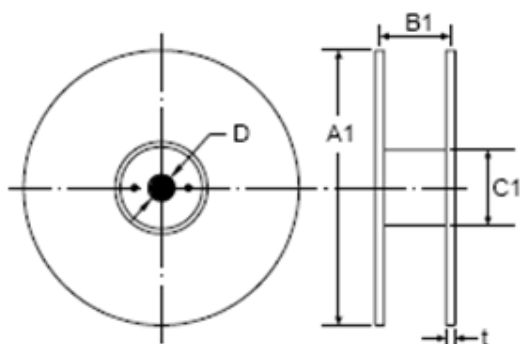
 ± 0.5

d

0.8

 ± 0.1

Reel



A1

330.0

 ± 2.0

B1

70.0

 ± 2.0

C1

82.0

 ± 2.0

D

25.0

 ± 0.5

t

2.0

 ± 0.2

Quantity: 1000pcs