规格承认书

APPROVAL SHEET

客户名称 Customers			
客户料号 Customers P/N			
物料编码 Product No	LQGB40015		
物料名称 Product Name	陶瓷气体放电管，CERAMIC GAS DISCHARGE TUBE		
规格型号 Specifications	JSE 3R-150-A6-SMD		
日期 Date	2024.05.21	版本 Version	2024.A

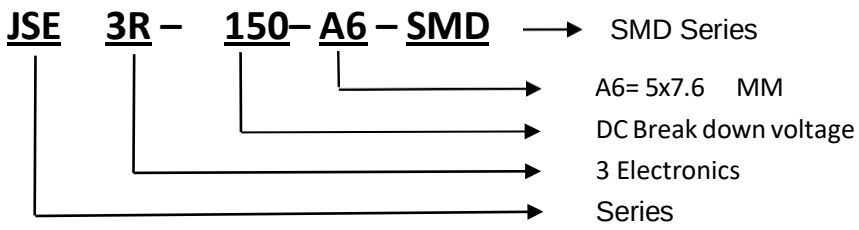
销售方确认（Approved）

拟制（Prepared By）	苏杭
审核（Audit）	史宏斌
批准（Approval）	张民

使用方确认（Approved）

项目审核（Project Audit）	
品质批准（Quality Approval）	
客户承认（APPROVED ）	

1. Part Number Code



2. Size:Φ5×7.6

Voltage: 150V±20%

Maximum Impulse Discharge Current(8/20μs): 10(KA)

Altemating Discharge Current: 10(A)

General application:

⇒For Telecom

Condition	Products
CPE-Side Tip-Ring Signal Wire	Splitter
CO-Side Tip-Ring Signal Wire	XDSL、Splitter
Wireless	Antenna
General	(ITU-T)Other In Customer

For Power System

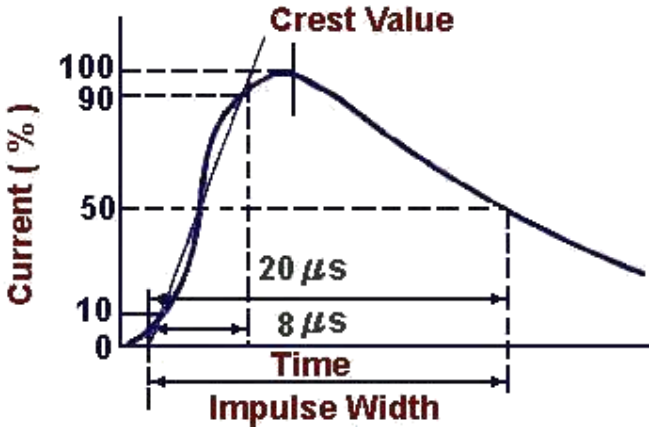
Condition	Products
Out-Side Power Line	Solar Power Plate、HID-Lights、LED-Lights
Other	Projector

3. SpecificationI

Model Name	DC spark-over Voltage（V）	Maximum Impulse Breakdown Voltage（V）	Maximum Impulse Discharge Current（8/20 µs）（kA）	Impulse Life (10/1000µs)（100A）	DC Holdover Voltage（ms）	AC discharge Current（A）	Minimum Insulation Resistance		Maximum Capacitance（pF）
	100V/s	1kV/µs	10 times	times	85V	50Hz,1s	Test Voltage DC(V)	（GΩ）	1MHz
3R-150	150 ±20%	500	10	300	＜150	10	50	＞10	＜2

- Operationandstoragetemperature.......................................-55~+125°C
- Climaticcategory(IEC 60068-1).. 55/125/21
- Black Marking……..……..……..……..……..……..……..……..……....3R-150
- Weight .... ~1g

4. Electrical Rating

Item	Test Condition / Description	Requirement
DC Breakdown Voltage	The voltage is measured with a low rate of rise dv / dt ≒100 v/s	To meet the specified value
Maximum Impulse Breakdown Voltage	The maximum impulse breakdown voltage is measured with a rise time of dv / dt ≒1000 v/ μ s	
Maximum Impulse Discharge Current	The maximum current within gas tube voltage change of ±20% when one impulse is applied. Applied waveform : 8/20 μ sec 	
Maximum AC Discharge Current	Rated rms value of ac current at 50 Hz , 1sec. Requirements of: Intervals: 3 min 2-electrode gas tube 10 discharges 3-electrode gas tube 10 discharges	
DC Holdover Voltage	The maximum DC voltage across the two terminals of gas tube under which it may be expected to return to the high impedance state after the gas tube breakdown.	
Insulation Resistance	The resistance of gas tube shall be measured each terminal to each other terminal. Applied voltage: gas tube dc breakdown voltage under 150V, the test voltage is 50V dc; with all other types at 100V dc.	
Capacitance	The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency : 1 KHZ In measurements involving 3-electrode gas tubes ,the terminal not being tested shall be connected to a ground plane.	

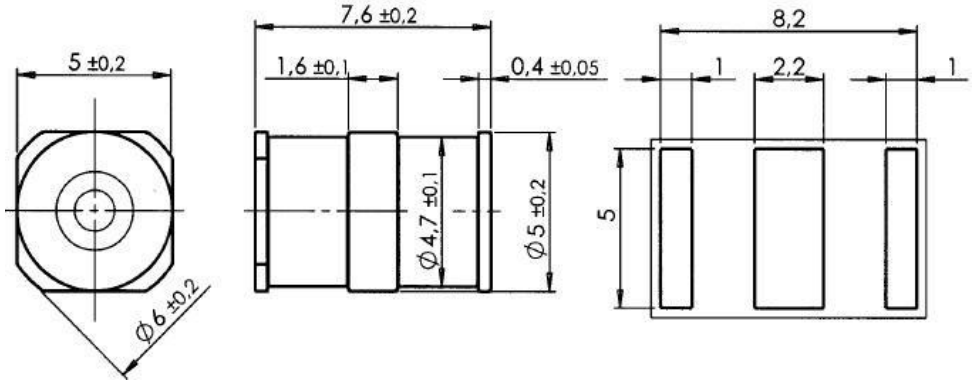
5. Environmental Reliability Characteristics

Item	Standard	Test conditions / Methods	Specifications
Solderability	IEC60068-2-20	245 ± 3 ℃ , 3 ± 0.3sec	at least 95% of terminal electrode is covered by new solder
Resistance to soldering heat	IEC60068-2-20	260 ± 3 ℃ , 10 ± 1sec	|△V/V| ≦25% No visible damage
Temperature Cycle Test	IEC60068-2-14	The thermal shock conditions shown below shall be repeated 5 cycles Step 1: -40 ± 2, 30 minutes Step 2: Room temperature, 4 minutes Step 3: 125 ± 2, 30 minutes Step 4: Room temperature, 4 minutes	|△V/V| ≦25% No visible damage
Humidity Resistance	IEC60068-2-3	40 ± 2℃ , 9 0 ~ 95 % RH , 1000 ± 24hrs	|△V/V| ≦25% No visible damage
High Temp. Storage	GB/T9043 7.7	125 ± 2 ℃ , 2 hrs	|△V/V| ≦25% No visible damage
Low Temp. Storage	GB/T9043 7.8	-40± 2 ℃ , 2 hrs	|△V/V| ≦25% No visible damage

6. Dimension

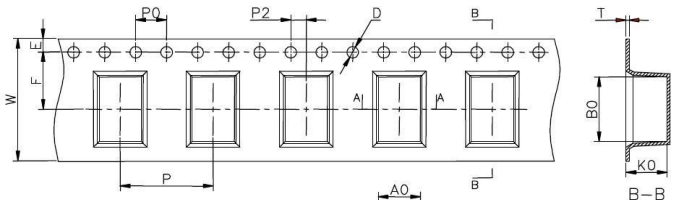
Dimensions in mm

Product Dimensions ***Recommended Soldering Pad***

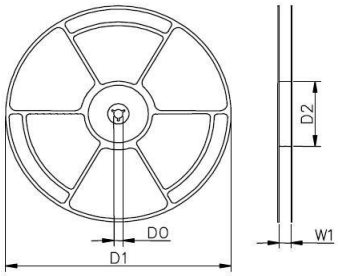


7. Packing advice

1000PCS/Reel



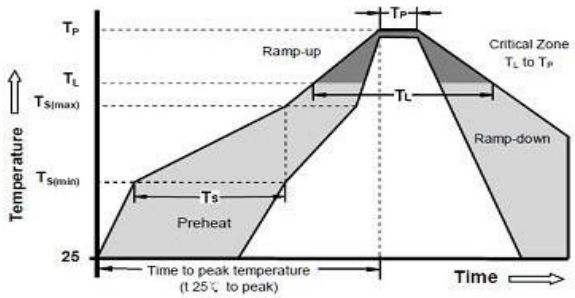
SMD-tape according to IEC 60286-3



Symbol	Millimeters	Inches
W	16±0.3	0.630±0.012
A0	5.4±0.1	0.213±0.004
B0	8.4±0.1	0.331±0.004
K0	5.3±0.1	0.209±0.004
P	12±0.1	0.472±0.004
F	7.5±0.1	0.295±0.004
E	1.75±0.1	0.069±0.004
D	1.5+0.1/-0.0	0.059+0.004/-0.0
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
T	0.4±0.1	0.016±0.004
D0	13.3±0.15	0.524±0.006
D1	330±2	12.992±0.079
D2	100+1/-2	3.937+0.039/-0.079
W1	16.5±0.4	0.65±0.016

8. Soldering parameter

Soldering Parameters - Reflow Soldering (Surface Mount Devices)



Reflow Condition		Pb - Free assembly
Preheat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 -180 Seconds
Average ramp up rate (Liquids Temp T_L) to peak		3°C/second max
$T_{S(max)}$ to TL - Ramp-up Rate		5°C/second max
Reflow	- Temperature (T_L) (Liquids)	217°C
	- Time (min to max) (t_s)	60 -150 Seconds
Peak Temperature (T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		10 - 30 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		260°C