Gas Discharge Tube (GDT) Data Sheet

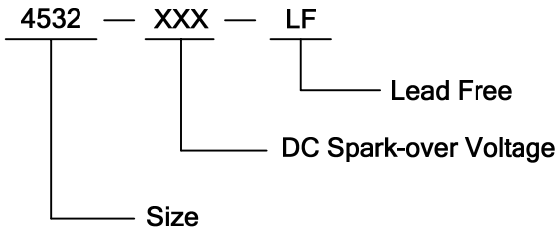
Features

- High insulation resistance.
- Low capacitance (≤0.5pF).
- 2000A 8/20μs maximum surge current capacity in accordance with IEC61000-4-5.
- 4KV 10/700μs maximum surge rating in accordance with ITU-TK.21
- Surface mounted gas arrester
- Micro-Gap Design
- Size 4532(1812)
- Storage and operating temperature: -40℃ ~ +85℃
- Meets MSL level 1, per J-STD-020
- Safety certification: UL: E244458

Applications

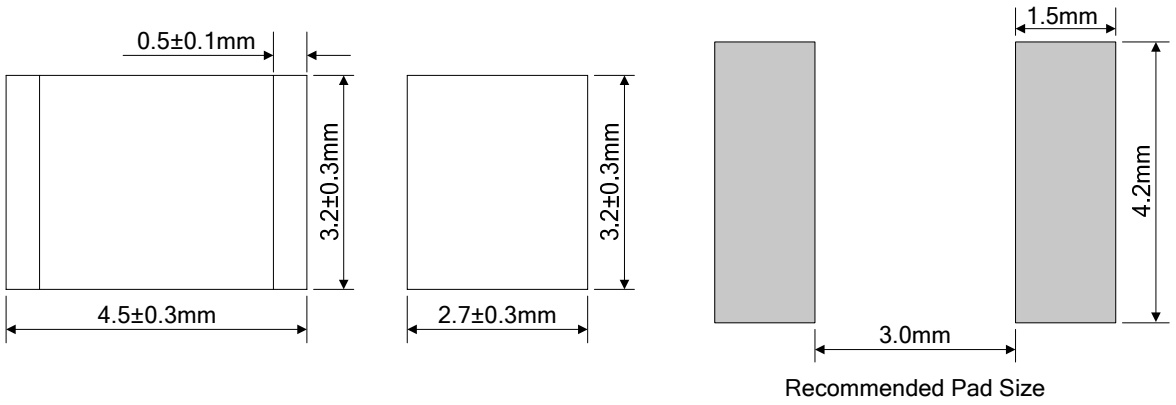
- Repeaters, Modems.
- Telephone Interface, Line cards.
- Data communication equipment.
- Line test equipment

Part Number Code and Marking



090: Device Marking Code

Dimensions



Recommended Pad Size

Electrical Characteristics

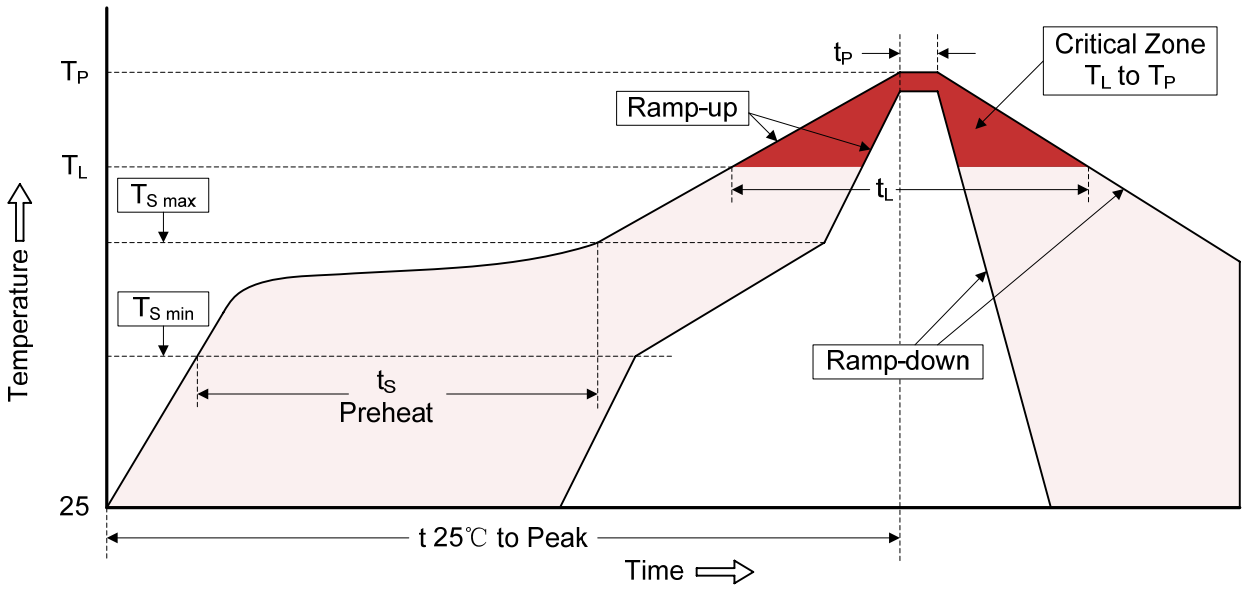
Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Impulse Life Test	Minimum Insulation Resistance		Maximum Capacitance	Nominal Impulse Discharge Current	Impulse Withstanding Voltage Capacity	Device Marking Code
	100V/s	1KV/μs	8/20μs 100A	Test Voltage	(GΩ)	(1MHz 1V)	8/20μs		
	(V)	(V)	(Times)	DC(V)		(pF)	(A)		
4532-075-LF	55~95	600	300	25	1	0.5	2000	10/700μs 4kV ±5 Times	075
4532-091-LF	63~117	700	300	50	1	0.5	2000		090
4532-121-LF	84~156	700	300	50	1	0.5	2000		120
4532-151-LF	105~195	700	300	50	1	0.5	2000		150
4532-201-LF	140~260	750	300	100	1	0.5	2000		200
4532-231-LF	161~299	750	300	100	1	0.5	2000		230
4532-301-LF	210~390	900	300	100	1	0.5	2000		300
4532-351-LF	245~455	900	300	100	1	0.5	2000		350
4532-401-LF	280~520	1000	300	100	1	0.5	2000		400
4532-421-LF	294~546	1000	300	100	1	0.5	2000		420
4532-471-LF	329~611	1000	300	100	1	0.5	2000		470
4532-501-LF	350~650	1100	300	100	1	0.5	2000		500
4532-601-LF	420~780	1200	300	100	1	0.5	2000		600

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, without causing the DC spark-over voltage to change more than 25% from its initial value.	
Impulse Withstanding Voltage	The maximum 10/700μs surge that can be applied to the Gas Tube, 5 positive and 5 negative surges, with 1 minute interval time, without causing the DC spark-over voltage to change more than 25% from its initial value.	

Recommended Soldering Conditions

Reflow Soldering

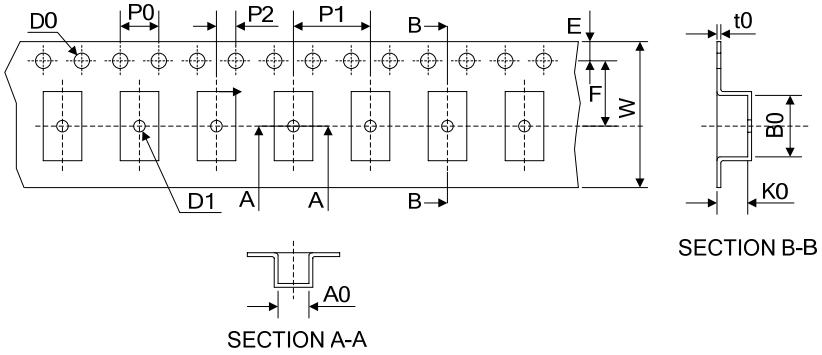


Recommended Conditions

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.

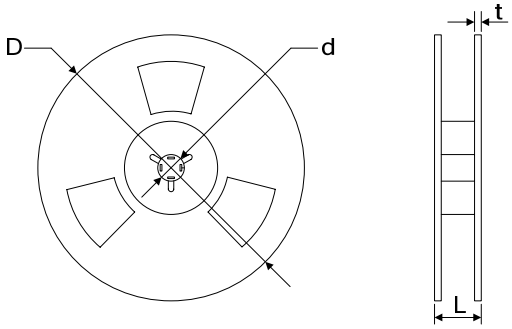
Packaging

Tape



Items	Dimension (mm)	
	Spec.	Tolerance
W	12.00	±0.20
P0	4.00	±0.10
P1	8.00	±0.20
P2	2.00	±0.10
D0	1.45	±0.10
D1	1.00	±0.10
E	1.75	±0.10
F	5.50	±0.10
A0	3.80	±0.10
K0	3.20	±0.10
B0	4.90	±0.10
t0	0.40	±0.10

Reel



D	330.00	±1.00
d	13.00	±0.50
L	16.00	±0.50
t	2.00	±0.20
Quantity: 2500pcs		