Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

4532 series

RoHS compliant & free

Product specification– July 12, 2023 V.1

Gas Discharge Tube (GDT) Data Sheet

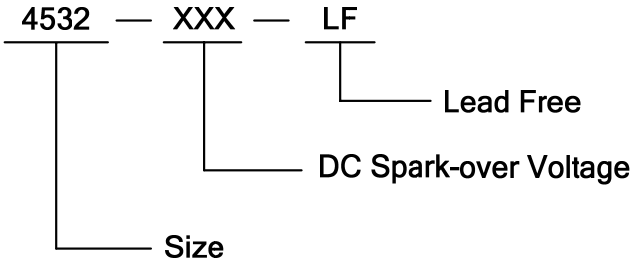
Features

- High insulation resistance
- Low capacitance (≤0.5pF)
- 2KA 8/20μs maximum surge current capacity in accordance with IEC 61000-4-5& IEC 61643-311
- 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℃ ~ +90℃
- Meets MSL level 1, per J-STD-020
- Safety certification: UL & TUV

Applications

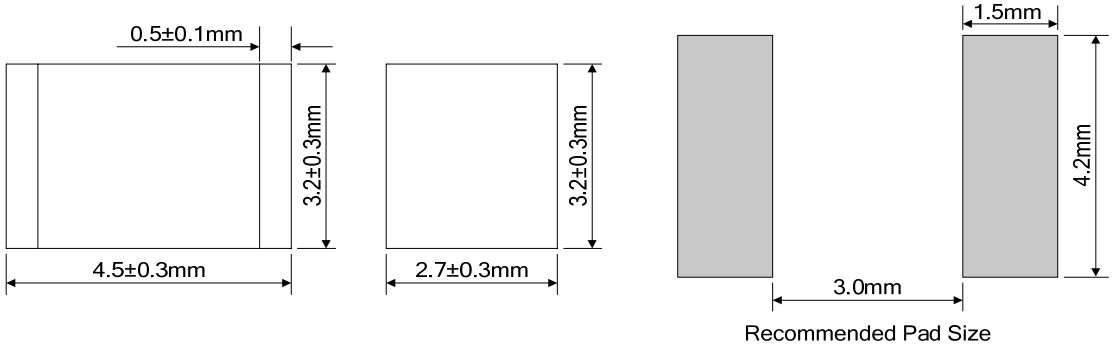
- Repeaters, Modems
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment

Part Number Code and Marking



090: Device Marking Code

Dimensions



Electrical Characteristics

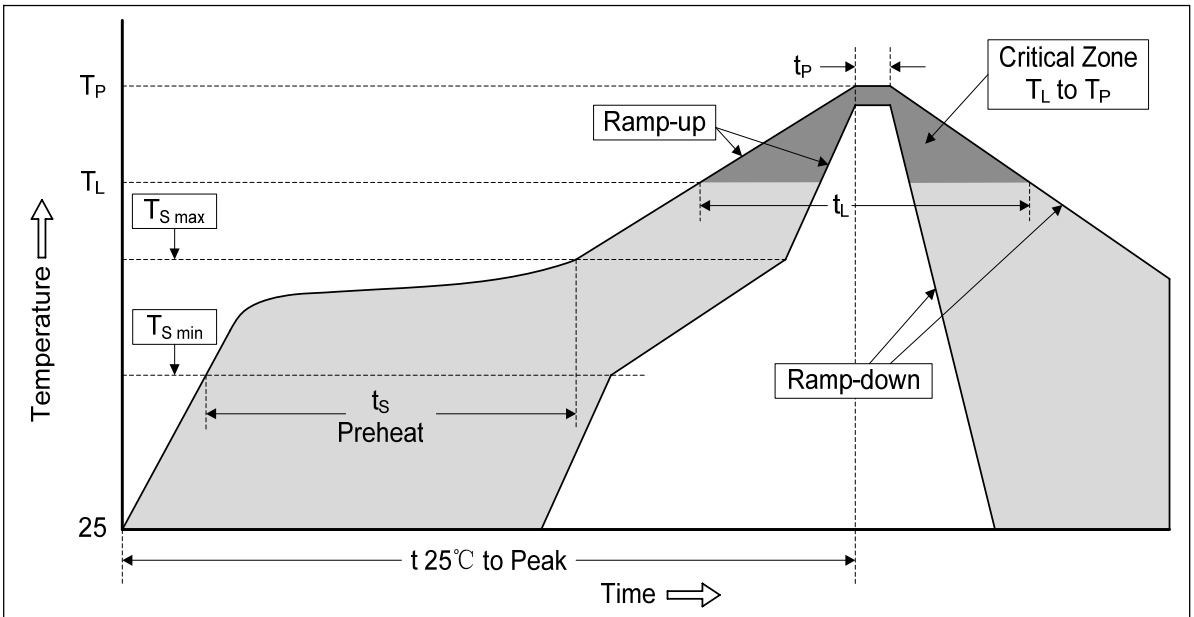
Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Withstanding Voltage Capacity	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	10/700μs 10times	Test Voltage	(GΩ)	(1MHz 1V)	
	(V)	(V)	(KA)	(KV)	DC(V)		(pF)	
4532-075-LF	75±30%	600	2	4	50	1	0.5	075
4532-091-LF	90±30%	700	2	4	50	1	0.5	090
4532-121-LF	120±30%	700	2	4	50	1	0.5	120
4532-151-LF	150±30%	700	2	4	50	1	0.5	150
4532-201-LF	200±30%	750	2	4	100	1	0.5	200
4532-231-LF	230±30%	750	2	4	100	1	0.5	230
4532-301-LF	300±30%	900	2	4	100	1	0.5	300
4532-351-LF	350±30%	900	2	4	100	1	0.5	350
4532-401-LF	400±30%	1000	2	4	100	1	0.5	400
4532-421-LF	420±30%	1000	2	4	100	1	0.5	420
4532-471-LF	470±30%	1000	2	4	100	1	0.5	470
4532-501-LF	500±30%	1100	2	4	100	1	0.5	500
4532-601-LF	600±30%	1200	1	4	100	1	0.5	600
4532-801-LF	800±30%	1600	1	4	100	1	0.5	800
4532-1000-LF	1000±20%	2400	1	4	100	1	0.5	102
4532-1200-LF	1200±20%	2600	1	4	100	1	0.5	122
4532-1500-LF	1500±20%	2800	1	4	100	1	0.5	152

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.	
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.	

Recommended Soldering Conditions

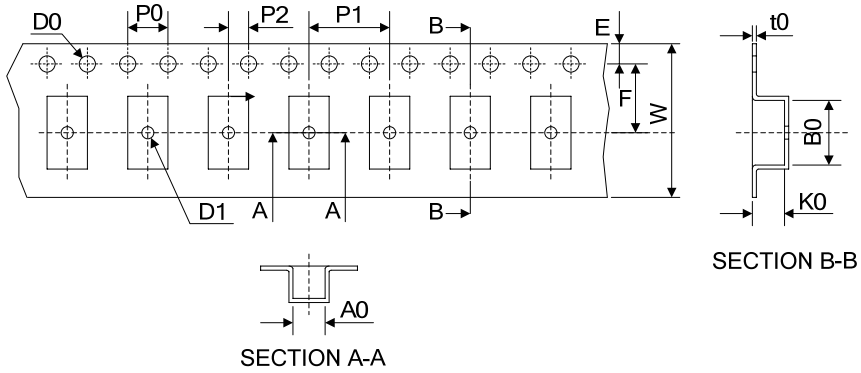
Reflow Soldering



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.

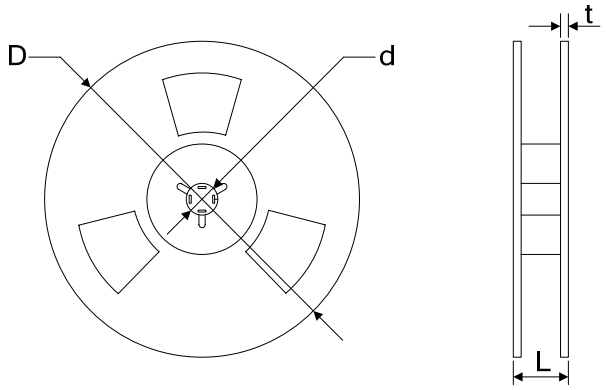
Packaging

Tape



Items	Dimension (mm)	
	Spec.	Tolerance
W	12.00	±0.20
P0	4.00	±0.10
P1	8.00	±0.20
P2	2.00	±0.10
D0	1.55	±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	±2.00
d	13.00	±0.50
L	16.00	±2.00
t	2.00	±0.20

Quantity: 2500pcs