GDT2R75D-T4532 Thru GDT2R470D-T4532

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GDT2R75D-T4532 Thru GDT2R470D-T4532

Gas Discharge Tube Surge 3KA(8/20μs)

Features

- Extremely small size.
- Extremely fast response time.
- Excellent SMD handing.
- Stable performance over life.
- Very low capacitance.
- High insulation resistance.
- Storage and operating temperature -40 ~ +125ºC.
- UL-identification.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen free parts, ex. GDT2R75D-T4532-H.

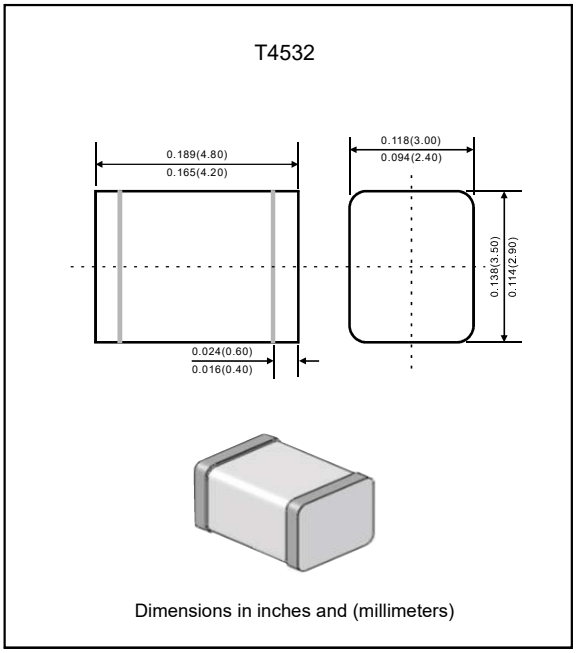
Applications

- Splitter.
- PCI Cards.
- Morden.
- Line cards.

Mechanical data

- Case : Molded plastic, T4532
- Terminals : Solder plated, solder able per J-STD-002.

Package outline



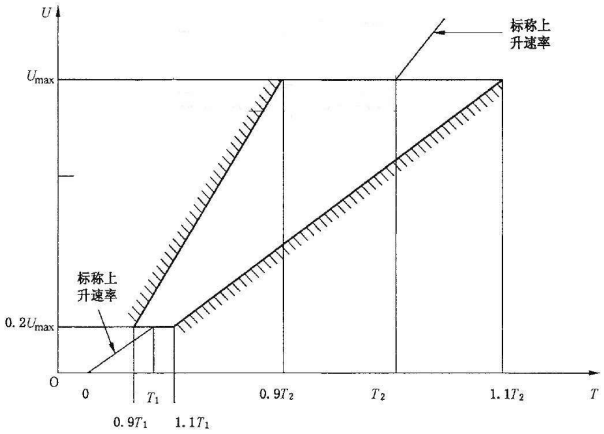
Dimensions in inches and (millimeters)

Electrical specifications

Parameter	GDT2R75D-T4532	GDT2R90D-T4532	GDT2R150D-T4532	GDT2R230D-T4532	GDT2R300D-T4532	GDT2R350D-T4532	GDT2R400D-T4532	GDT2R470D-T4532	Unit
DC spark-over voltage (100V/s)	±30	±30	±20	±20	±20	±20	±20	±20	%
Max impulse breakdown voltage (1KV/μs)	600	600	600	800	850	950	1000	1100	V
Discharge current (8/20μs, 10 times)	3	3	3	3	3	3	3	3	KA
AC Discharge current (50Hz, 1s)	3	3	3	3	3	3	3	3	A
Impulse life (10/1000μs, 100A)	100	100	100	100	100	100	100	100	Times
Minimum insulation resistance	50	50	100	100	100	100	100	100	V
	1	1	1	1	1	1	1	1	GΩ
Max. Capacitance (1MHz)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	Pf

GDT2R75D-T4532 Thru GDT2R470D-T4532

Electrode arrester



8/20us, Test wave

T1=1.25T=8us±20%

T2=20us±20%

10/700us,Test Wave

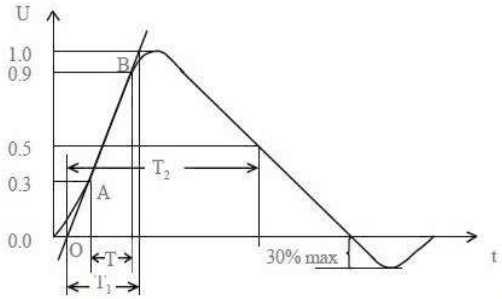
T1=1.67T=10us±20%

T2=700us±20%

10/1000us,Test Wave

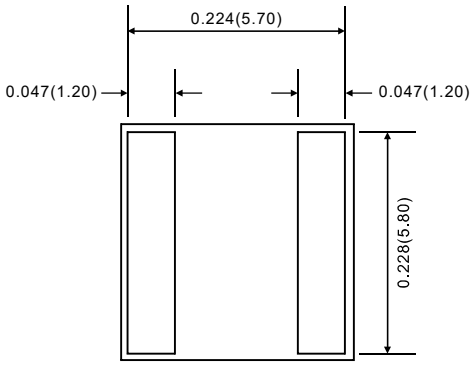
T1=1.67T=10us±20%

T2=1000us±20%



Suggested solder pad layout

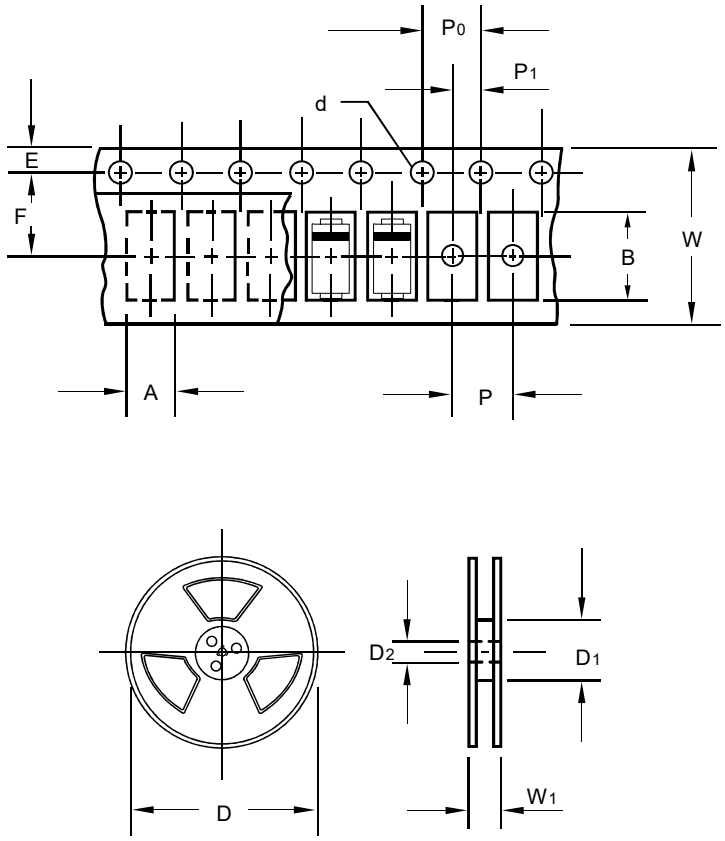
T4532



Dimensions in inches and (millimeters)

GDT2R75D-T4532 Thru GDT2R470D-T4532

Packaging Information

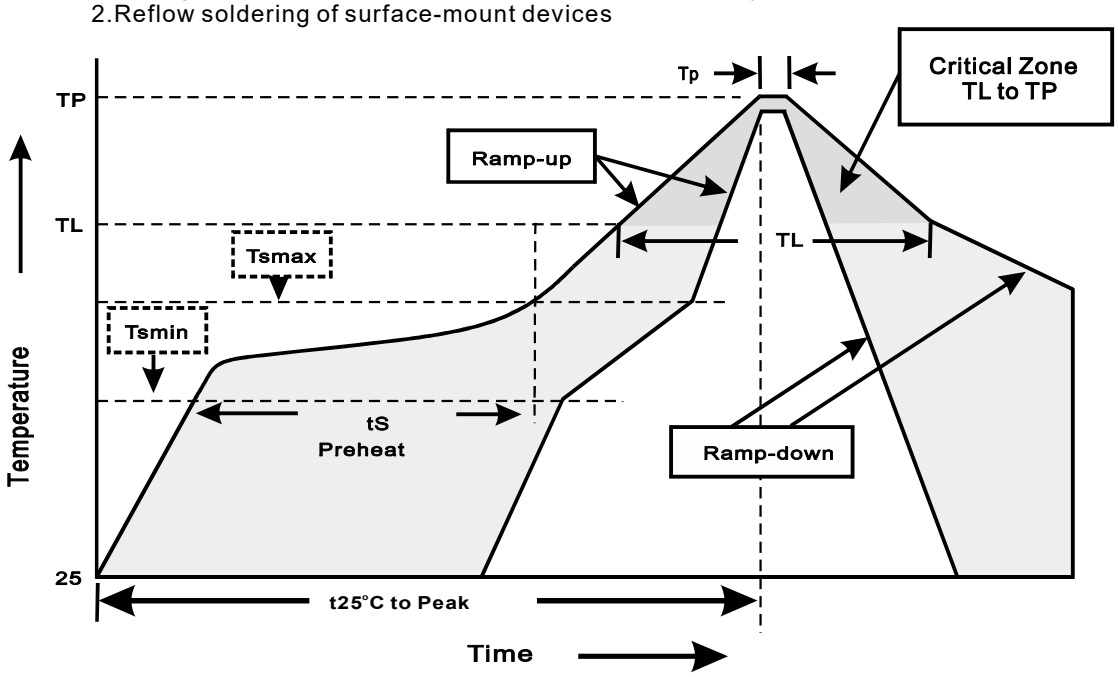


ERF	MM
A	3.9±0.2
B	4.9±0.2
d	Ø1.5±0.1
E	1.75±0.1
F	5.5±0.2
P	8.0±0.2
P0	4.0±0.2
P1	2.0±0.2
W	12±0.3
D	Ø330±4.0
D1	Ø50±3.0
D2	Ø13±0.2
W1	16.8±0.2

GDT2R75D-T4532 Thru GDT2R470D-T4532

Suggested thermal profiles for soldering processes

1.Storage environment: Temperature=5°C~40°C Humidity=55%±25%
2.Reflow soldering of surface-mount devices



3.Reflow soldering

Profile Feature	Soldering Condition
Average ramp-up rate(T_L to T_P)	<3°C/sec
Preheat -Temperature Min(Tsmin) -Temperature Max(Tsmax) -Time(min to max)(t_s)	 150°C 200°C 60~120sec
Tsmax to T_L -Ramp-upRate	 <3°C/sec
Time maintained above: -Temperature(T_L) -Time(t_L)	 217°C 60~260sec
Peak Temperature(T_P)	255°C-0/+5°C
Time within 5°C of actual Peak Temperature(t_P)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes