GDT2R75-T5454 Thru GDT2R600-T5454

List

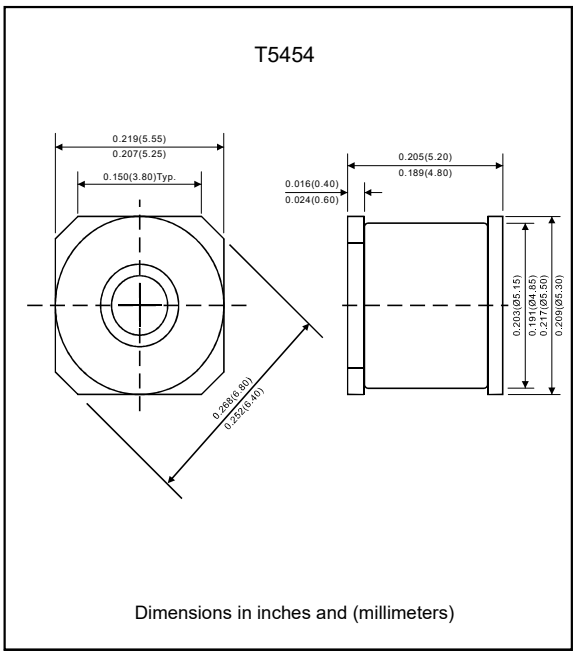
GDT2R75-T5454 Thru GDT2R600-T5454

Gas Discharge Tube Surge 5KA(8/20μs)

Features

- Extremely small size.
- Extremely fast response time.
- Eexcllent SMD handing
- Stable performance over life.
- Very low capacitance.
- High insulation resistance.
- Storage and operating temperature -40 ~ +125℃.
- UL-identification.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen free parts, ex. GDT2R75-T5454-H.

Package outline



Dimensions in inches and (millimeters)

Applications

- Splitter.
- PCI Cards .
- Line cards.

Mechanical data

- Meets MSL level 1, per J-STD-020, LF Maximum peak 260℃.
- Case : Molded plastic, T5454.
- Terminals : Solder plated, solder able per J-STD-002.
- Polarity : Indicated by cathode band.
- Mounting Position : Any.

Electrical specifications

Parameter	GDT2R75 -T5454	GDT2R90 -T5454	GDT2R150 -T5454	GDT2R230 -T5454	GDT2R300 -T5454	GDT2R350 -T5454	GDT2R400 -T5454	GDT2R470 -T5454	GDT2R600 -T5454	Unit
Impulse spark-over voltage (100V/s)	±30	±30	±20	±20	±20	±20	±20	±20	±20	%
Impulse breakdown voltage (1KV/μs)	600	600	600	800	850	950	1000	1100	1200	V
Discharge current (8/20μs, 10 times)	5	5	5	5	5	5	5	5	5	KA
AC Discharge current (50Hz, 1s)	5	5	5	5	5	5	5	5	5	A
Impulse life (10/1000μs, 10A)	100	100	100	100	100	100	100	100	100	Times
Minimum insulation resistance	50	50	100	100	100	100	100	100	100	DC(V)
	1	1	1	1	1	1	1	1	1	GΩ
Max. Capacitance (1MHz)	1	1	1	1	1	1	1	1	1	pF

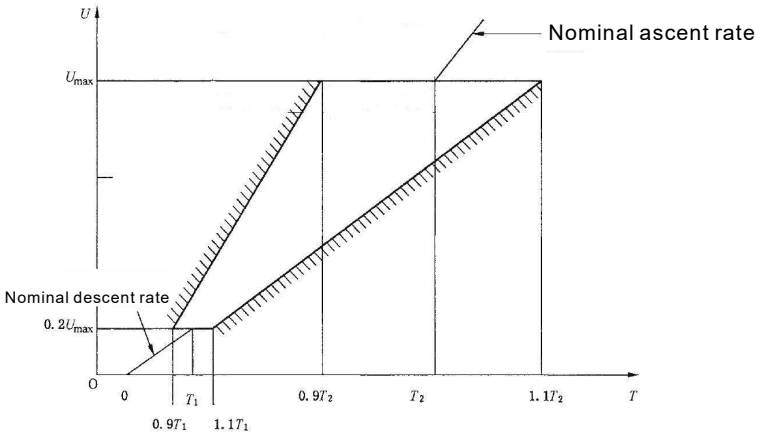
Marking

Type number	Marking code
GDT2R75-T5454	2R75
GDT2R90-T5454	2R90
GDT2R150-T5454	2R150
GDT2R230-T5454	2R230
GDT2R300-T5454	2R300
GDT2R350-T5454	2R350
GDT2R400-T5454	2R400
GDT2R470-T5454	2R470
GDT2R600-T5454	2R600

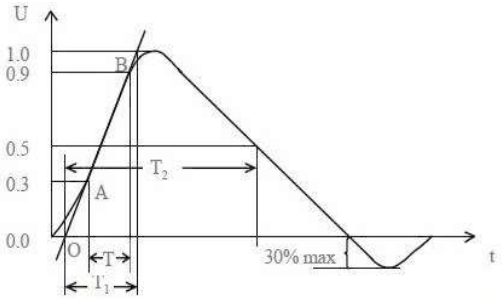
GDT2R75-T5454 Thru GDT2R600-T5454

Electrode arrester

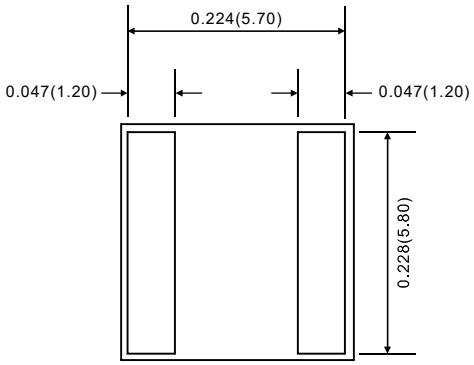
DC breakdown voltage



8/20us, Test wave	10/700us,Test Wave	10/1000us,Test Wave
T1=1.25T=8us±20%	T1=1.67T=10us±20%	T1=1.67T=10us±20%
T2=20us±20%	T2=700us±20%	T2=1000us±20%



Suggested solder pad layout

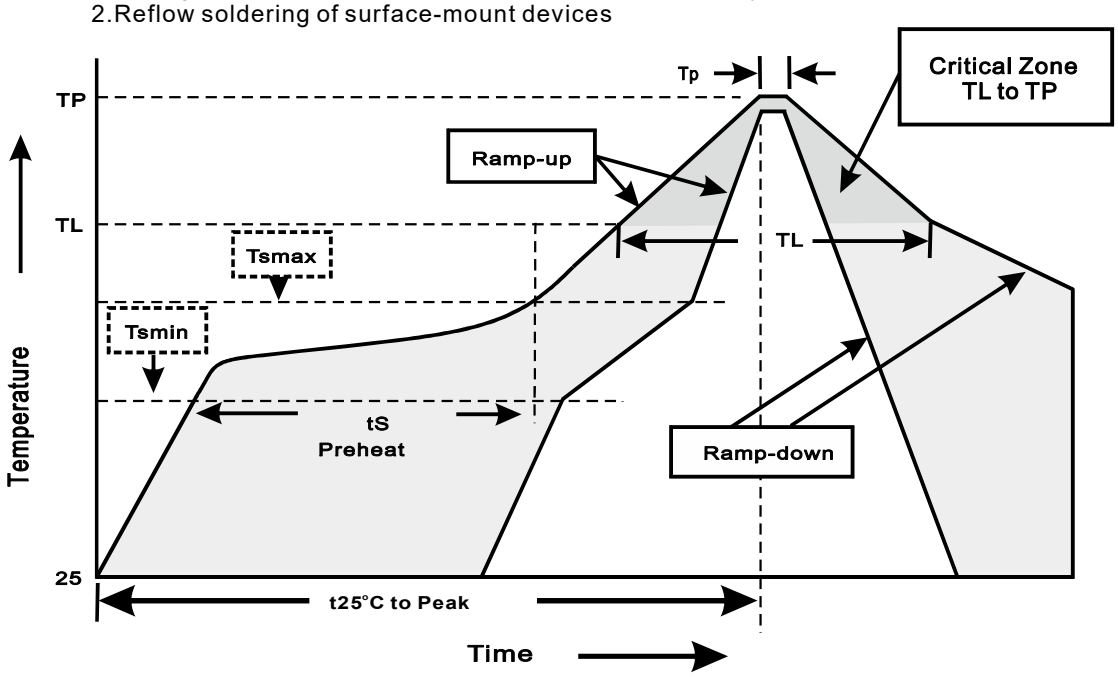


Dimensions in inches and (millimeters)

GDT2R75-T5454 Thru GDT2R600-T5454

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