

DESCRIPTION

The KG5042 series GDT offers high surge ratings in a miniature package. It's designed for surface mounting on PCB with size 5.0x5.0x4.2 mm. Special design features provide high levels of protection against fast rising transients in the $100V/\mu s$ to $1kV/\mu s$ range usually caused by lightning disturbances. Low insertionloss is perfectly suited to broadband equipment applications. The capacitance does not vary with voltage , and will not cause operational problems with ADSL2+, where capacitance variation across Tip and Ring is undesirable. For AC Power Cross of long duration, over current protection is recommended.

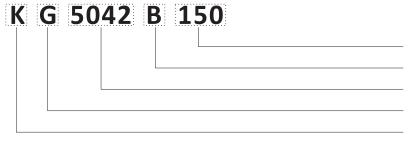
FEATURES

- > RoHS compliant and Lead-free.
- > High insulation resistance.
- > Low capacitance
- > Max Surge current capacity 5000A 8/20 us.
- > Surface Mounted Gas Arrester
- > Size 5.0x5.0x4.2mm

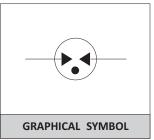
APPLICATIONS

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

PART NUMBER CODE







DC Breakdown Voltage: 090=90V,150=150V,200=200V,Etc.

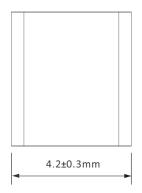
Polar: B=Bidirectional,U=Unidirectional
Product Size: 5042=5.0x5.0x4.2mm
Product Line: G=Gas Discharge Tube

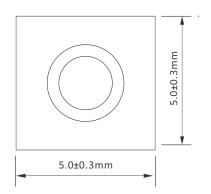
Kangtai Brand

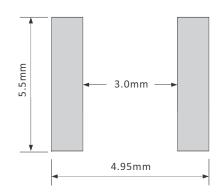
ELECTRICAL CHARACTERISTIC

PART NUMBER	DC BREAKDOWN VOLTAGE	TOLERANCE OF Vs	IMPULSE SPARK-OVER VOLTAGE	IMPULSE DISCHARGE CURRENT	INSULAT RESISTA		C@1MHz Max.
	100V/s		1KV/uS Max.	8/20uS Min.	Gohm Min.	DC	
KG5042B070	70V	±20%	800V	5000A	1	25V	1.0pF
KG5042B090	90V	±20%	800V	5000A	1	50V	1.0pF
KG5042B150	150V	±20%	800V	5000A	1	100V	1.0pF
KG5042B200	200V	±20%	800V	5000A	1	100V	1.0pF
KG5042B300	300V	±20%	900V	5000A	1	100V	1.0pF
KG5042B350	350V	±20%	900V	5000A	1	100V	1.0pF
KG5042B400	400V	±20%	950V	5000A	1	100V	1.0pF
KG5042B600	600V	±20%	950V	5000A	1	100V	1.0pF
KG5042B800	800V	±20%	1100V	5000A	1	100V	1.0pF

PRODUCT DIMENSIONS







Recommended Pad Size

ENVIRONMENTAL RELIABILITY CHARACTERISTICS

Testing Items	Technical Standards		
High Temperature Storage Test	Temperature:85°C;Time:2H		
Low Temperature Storage Test	Temperature:-40°C;Time:2H		
Vibration	Frequency:10-500Hz;Amplitude:0.15mm;Time:45min		
Resistance of soldering heat	Temperature:260°C;Time of dip soldering:10s,1time		

SOLDERABILITY TEST

Solderability	Solder Pot Temperature:	245±5℃	
Solderability	Solder Dwell Time:	4~6 seconds	

REFLOW PROFILE

Reflow Condition		Lead-free assembly	
Pre Heat	Temperature Min (Ts(min))	150°C	
	Temperature Max (Ts(max)	200°C	
	Time (min to max) (ts)	60 – 180 secs	
Average ramp up rate (Liquidus Temp (TL) to peak		3°C/second max	
Ts(max)to TL - Ramp-up Rate		3°C/second max	
Reflow	Temperature (TL) (Liquidus)	217°C	
	Time (min to max) (ts)	60 – 150 seconds	
Peak Temperature (T _P)		260°C	
Time within 5°C of actual peak Temperature (tp)		~10 seconds	
Ramp-down Rate		6°C/second max	
Time 25°C to peak Temperature (T _P)		8 minutes Max.	
Do not exceed		260°C	

