

DESCRIPTION

The KG3216 series GDT offers high surge ratings in a miniature package. It's designed for surface mounting on PCB with size $3.2 \times 1.6 \times 1.6$ mm. Special design features provide high levels of protection against fast rising transients in the $100 \text{V/}\mu\text{s}$ to $1 \text{kV/}\mu\text{s}$ 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.

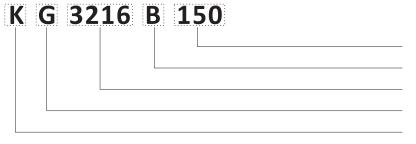
FEATURES

- > RoHS compliant and Lead-free.
- > High insulation resistance.
- > Low capacitance
- > Max Surge current capacity 500A 8/20 us.
- > Surface Mounted Gas Arrester
- > Size 3.2x1.6x1.6mm

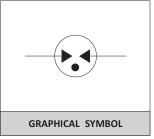
APPLICATIONS

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

PART NUMBER CODE







DC Breakdown Voltage: 150=150V,200=200V,300=300V,Etc.

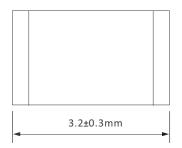
Polar: B=Bidirectional,U=Unidirectional **Product Size**: 3216=3.2x1.6x1.6mm **Product Line**: G=Gas Discharge Tube

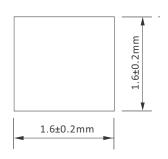
Kangtai Brand

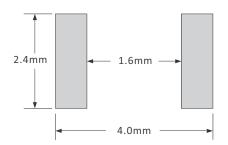
ELECTRICAL CHARACTERISTIC

| 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 | |
| KG3216B150 | 150V | ±30% | 700V | 500A | 1 | 100V | 0.6pF |
| KG3216B200 | 200V | ±30% | 700V | 500A | 1 | 100V | 0.6pF |
| KG3216B300 | 300V | ±30% | 800V | 500A | 1 | 100V | 0.6pF |
| KG3216B350 | 350V | ±30% | 800V | 500A | 1 | 100V | 0.6pF |
| KG3216B400 | 400V | ±30% | 950V | 500A | 1 | 100V | 0.6pF |
| KG3216B600 | 600V | ±30% | 950V | 500A | 1 | 100V | 0.6pF |

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°C | |
|---------------|-------------------------|-------------|--|
| | 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 | | | |
| | | | | | |

