

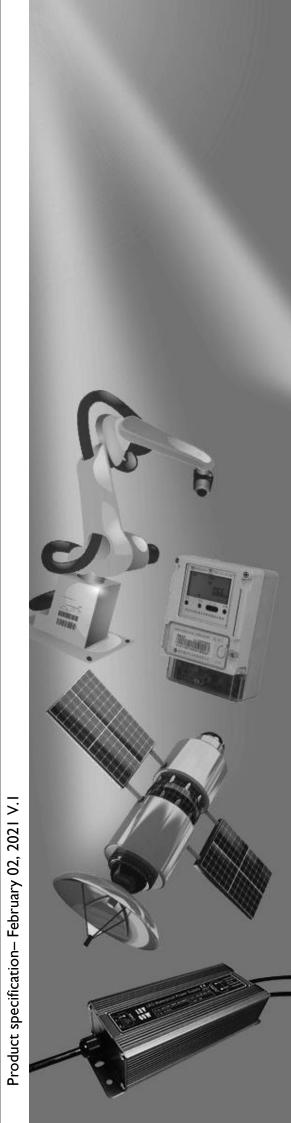
# **DATA SHEET**

GAS DISCHARGE TUBES TELEPHONE INTERFACE

B32 series

RoHS compliant & free





**GAS DISCHARGE TUBS** 

Gas Discharge Tube (GDT) Data Sheet

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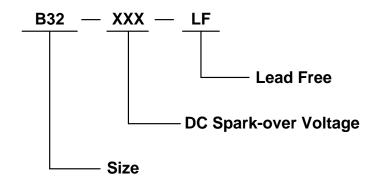
#### **Features**

- High insulation resistance
- Low capacitance (≤0.5pF)
- 500A 8/20µs maximum surge current capacity in accordance with IEC61000-4-5
- 4KV 10/700µs maximum surge rating in accordance with ITU-TK.21
- Surface mounted gas arrester
- Micro-Gap Design
- Size 3216(1206)
- Storage and operating temperature: -40°C ~ +85°C
- Meets MSL level 1, per J-STD-020
- Safety certification: UL

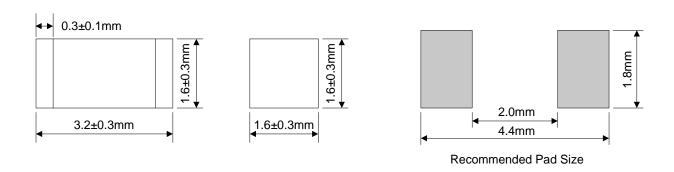
### **Applications**

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

#### **Part Number Code**



#### **Dimensions**





## **Electrical Characteristics**

| Part<br>Number | DC<br>Spark-over<br>Voltage | Maximum<br>Impulse<br>Spark-over<br>Voltage | Minimum<br>Insulation<br>Resistance |      | Maximum<br>Capacitance | Nominal<br>Impulse<br>Discharge<br>Current | Impulse Withstanding Voltage Capacity | Device<br>Marking |
|----------------|-----------------------------|---|-------------------------------------|------|------------------------|--|---------------------------------------|-------------------|
|                | 100V/s                      | 1000V/µs                                    | Test<br>Voltage                     | (GΩ) | (1MHz)                 | 8/20µs<br>10 Times                         | 10/700µs<br>10 Times                  | Code              |
|                | (V)                         | (V)   | DC(V)                               |      | (pF)                   | (A)  | (KV)                                  |                   |
| B32-150-LF     | 150±30%                     | 750   | 50                                  | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-200-LF     | 200±30%                     | 900   | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-230-LF     | 230±30%                     | 950   | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-300-LF     | 300±30%                     | 1000  | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-350-LF     | 350±30%                     | 1100  | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-400-LF     | 400±30%                     | 1100  | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-420-LF     | 420±30%                     | 1200  | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |
| B32-470-LF     | 470±30%                     | 1200  | 100                                 | 1    | 0.5                    | 500  | 4                                     | None              |

# **Electrical Ratings**

| Items                                 | Test Condition/Description   | Requirement                       |  |
|---------------------------------------|--|-----------------------------------|--|
| DC Spark-over<br>Voltage              | The voltage is measured with voltage ramp dv/dt=100V/s.  |                                   |  |
| Maximum Impulse<br>Spark-over Voltage | The maximum impulse spark-over voltage is measured with voltage ramp dv/dt=1000V/µs.   | To meet<br>the specified<br>value |  |
| Insulation<br>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<br>Discharge<br>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<br>Withstanding<br>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.           |                                   |  |

# Reliability

| Items                  | Test conditions / Methods   | Standard                              |  |  |
|------------------------|---|---------------------------------------|--|--|
| Cold Resistance        | Measurement after -40 °C /1000 HRS & normal temperature/2 HRS.  |                                       |  |  |
| Heat Resistance        | Measurement after 125 °C /1000 HRS & normal temperature/2 HRS.  | Factures are conformed to             |  |  |
| Humidity<br>Resistance | Measurement after humidity 90~95°C (45°C) /1000 HRS & normal temperature/2 HRS.   | Features are conformed to rated spec. |  |  |
| Temperature<br>Cycle   | 10 times repetition of cycle -40°C/30min  →normal, temp/2 min →125°C/30min, measurement after normal temp/2 HRS.            |                                       |  |  |
| Solder Ability         | Check for solder adhesion after 260 $\pm$ 5 $^{\circ}\mathrm{C}$ for 3sec , The body immersion depth 1.5mm in molten solder | Evenly covered by solder.             |  |  |
| Solder Heat            | Measurement after 260±5℃ solder for 10sec, The body immersion depth 1.5mm in molten solder                                  | Conformed to rated spec.              |  |  |

## **Recommended Soldering Conditions**

