



Switching spark gap

2RK-8 Series





Witching spark gaps designed specifi cally for voltage controlled switching of capacitive

Discharge circuits where a high energy, low loss, fast rate of switching is required. This series is ideally suited for applications where a

Capacitive discharge is utilized with a transformer to obtain pulses of very high voltage levels in the order of several thousand volts.



Features

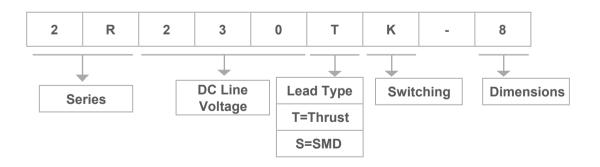
Extremely long life time

- 1. Stable performance over life
- 2. Insensitive performance against variations in temperature
- 3. Low switching losses
- 4. Very short breakdown time
- 5. High reliability by robust design
- 6. RoHS compatible

Recommended Applications

Ignition circuits

Part Number Code







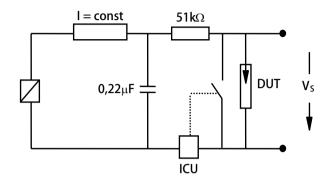
Electriacl Characteristics

| Part | No. | DC Spark-over Voltage | 200000 times for the first static breakdown voltage in the dark(v) | Number of onoff(ten thousand | Switching frequency | Insulation resistance at 100v DC | Capacitance | Breakdown time |
|-----------|-----------|-----------------------------|---|-------------------------------|---------------------|--|-------------|-------------------|
| DIP | SMD | (V) | (V) | (times) | (HZ) | (Ω) | (PF) | (NS) |
| 2R150TK-8 | 2R150SK-8 | 150±15% | <200 | 2000000 | 200 | ≥10 ⁹ | <1.5 | 50 |
| 2R230TK-8 | 2R230SK-8 | 230±15% | <270 | 400000 | 160 | ≥10 ⁹ | <1.5 | 50 |
| 2R300TK-8 | 2R300SK-8 | 300±15% | <355 | 400000 | 140 | ≥10 ⁹ | <1.5 | 50 |
| 2R320TK-8 | 2R320SK-8 | 320±15% | <380 | 400000 | 150 | ≥10 ⁹ | <1.5 | 50 |
| 2R350TK-8 | 2R350SK-8 | 350±15% | <415 | 400000 | 150 | ≥10 ⁹ | <1.5 | 50 |
| 2R370TK-8 | 2R370SK-8 | 370±15% | <440 | 400000 | 140 | ≥10 ⁹ | <1.5 | 50 |
| 2R400TK-8 | 2R400SK-8 | 400±15% | <475 | 400000 | 130 | ≥10 ⁹ | <1.5 | 50 |
| 2R450TK-8 | 2R450SK-8 | 450±15% | <540 | 400000 | 210 | ≥10 ⁹ | <1.5 | 50 |
| 2R470TK-8 | 2R470SK-8 | 470±15% | <570 | 400000 | 180 | ≥10 ⁹ | <1.5 | 50 |
| 2R500TK-8 | 2R500SK-8 | 500±15% | <600 | 400000 | 170 | ≥10 ⁹ | <1.5 | 50 |
| 2R550TK-8 | 2R550SK-8 | 550±15% | <660 | 400000 | 140 | ≥10 ⁹ | <1.5 | 50 |
| 2R600TK-8 | 2R600SK-8 | 600±15% | <720 | 400000 | 210 | ≥10 ⁹ | <1.5 | 50 |
| 2R730TK-8 | 2R730SK-8 | 730±15% | <900 | 400000 | 130 | ≥10 ⁹ | <1.5 | 50 |
| 2R800TK-8 | 2R800SK-8 | 800±15% | <1000 | 400000 | 100 | ≥10 ⁹ | <1.5 | 50 |

| DC Spark-over Voltage | DC Measuring Voltage | |
|-----------------------|----------------------|--|
| 150-400V | 100V | |
| 470-800V | 250V | |



Fig. 1: QC- test circuit (100% outgoing inspection)



DUT device under test

ignition control unit (sensit Discharge current 10 - 20 mA

Fig. 2: QC- test circuit (sampling inspection at 25 $^{\circ}$ C)

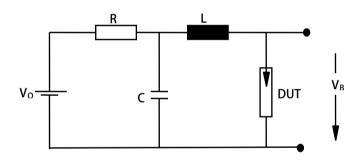
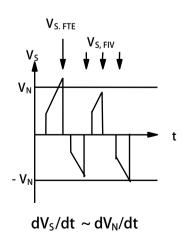
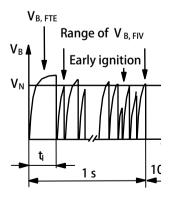


Fig. 1-1: Explanation of measurands

Fig. 2-2: Explanation of m



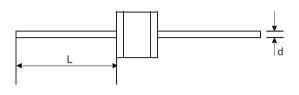


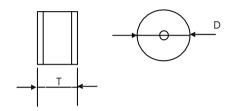




Dimension

□ = T (Axial lead type)

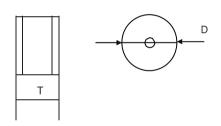




Unit:mm

| Item | Dimensions | | |
|------|------------|-----------|--|
| цетт | Spec. | Tolerance | |
| D | 8.0 | +0.3/-0.5 | |
| Т | 6.0 | +0.3/-0.5 | |
| L | 20 | Min. | |
| d | 0.8 | ±0.05 | |

□ = S (No lead type)



| nit:mn | |
|--------|--|
| | |
| | |

| Itam | Dimensions | | |
|------|------------|-----------|--|
| Item | Spec. | Tolerance | |
| D | 8.0 | +0.3/-0.5 | |
| Т | 6.0 | +0.3/-0.5 | |

Packaging Taping

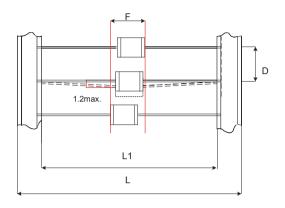
Unit:mm

| Plastic Tray (252×135×10mm) | Inner Box (270×145×50mm) | Outside Box (310×280×275mm) |
|--------------------------------|-----------------------------|--------------------------------|
| | | |
| 100 PCS/ Plastic Tray | 500 PCS/ Box | 5,000 PCS/ Carton |



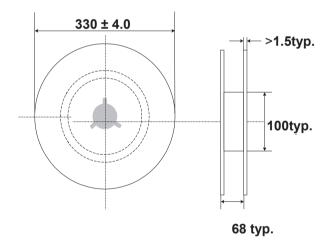


For 2-electrode Axial Lead GDT: 500 PCS/Reel



| Item | Dimensions | | |
|------|------------|-----------|--|
| цетт | Spec. | Tolerance | |
| L1 | 52 | ±2 | |
| L | 64 | ±3 | |
| D | 10 | ±0.5 | |
| F | T+1.4 | Max. | |

Unit:mm



Warehouse Storage Conditions of Products

- Storage Conditions:
- 1. Storage Temperature: -10°C~+40°C
- 2. Relative Humidity:≤75%RH
- 3. Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 1 year





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