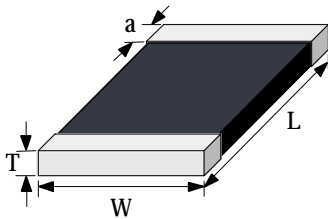


ESD、EFT、Surge Suppressor & EMI/RFI Filter

0402 DM Series

Dimensions



| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| Tmax. | - | 0.024 | - | 0.60 |
| a | 0.004 | 0.016 | 0.10 | 0.40 |
| L | 0.035 | 0.043 | 0.90 | 1.10 |
| W | 0.016 | 0.024 | 0.40 | 0.60 |

Features

- Extra low clamping voltage
- Excellent ESD endurance capability
- Excellent surge suppression capability
- Bidirectional clamping in a two-pin device
- Low leakage current
- No derating of maximum up to 85°C
- Adequate to replace a silicon TVS diode+EMC capacitor combination for save board space and mounting cost

Applications examples

- Desktop and Note PC
- Audio input-output terminal
- GPS systems
- Cellular phone
- CD/MD/MP3 player
- Portable devices (PDA, DSC, BlueTooth..)

WebLinks

Further infos see:

www.jumbotek.com

Further technical infos

Please E-mail: service@jumbotek.com

Specifications

- Packaging
Tape and Reel
T¹ 7 inch reel (10,000 pcs.)
- Material
Body: Semiconducting Ceramic
Terminals: Ni/Sn plated (code "P")
- Operating Temperature
-40 to +85°C (without derating)
- Solderability
260°C 2 sec (IEC 60068-2-58)
- Soldering Heat Resistance
260°C 5 sec. (IEC 60068-2-58)
- Response Time
<0.5ns
- Temperature coefficient (αV) of clamping voltage (V_c) @ specified test current
<0.01%/°C
- Power dissipation
0.05W max.
- Withstand ESD durability test severity of IEC 61000-4-2 Level 4 :
Contact discharge mode ; typical 8KV,max 20KV
Air discharge mode ; typical 15KV,max 30KV
Standards
IEC 61000-4-2
IEC 61000-4-3
IEC 61000-4-4
IEC 61000-4-5

| Type | Allowable continuous working voltage | Breakdown voltage at 1mA(DC) test current | Max. clamping voltage at spec. current (8/20 μ s) | Typ. Capacitance 1MHz | Typical Inductance |
|-----------------|--------------------------------------|---|---|-----------------------|--------------------|
| | $V_{M(DC)}$ (V) | $V_{N(DC)}$ (V) | V_c (V@A) | C_{typ} (pF) | L_{typ} (nH) |
| PD02S3R3DM271PT | 3.3 | 4.5 ~ 6.0 | 9.5@ 1 | 250 ~ 300 | 0.8 |
| PD02S5R5DM301PT | 5.5 | 7.8 ~ 9.8 | 15.0@ 1 | 280 ~ 330 | 0.8 |
| PD02S120DM201PT | 12.0 | 15.0 ~ 18.0 | 25.5@ 1 | 170 ~ 210 | 0.8 |

How to order

| PD | 02 | S | 3R3 | DM | 271 | P | T |
|-----------|--------------|-------------|---------------------------|------------------------|--|-----------------------------------|-------------------------|
| Type code | Chip Size | Single Chip | Allowable Working voltage | Diode-mode application | Capacitance Code | Termination Code | Packing Code |
| PolyDiode | 02 = EIA0402 | | 3R3 = 3.3VDC | | 271= 27 \times 10 ¹ 201= 20 \times 10 ¹ | P: Electroplating by <u>Ni/Sn</u> | T: Tape&Reel B: Bulk |