



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

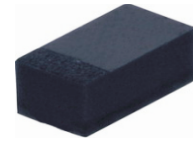
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



CPDERT5V0U(RoHS Device)

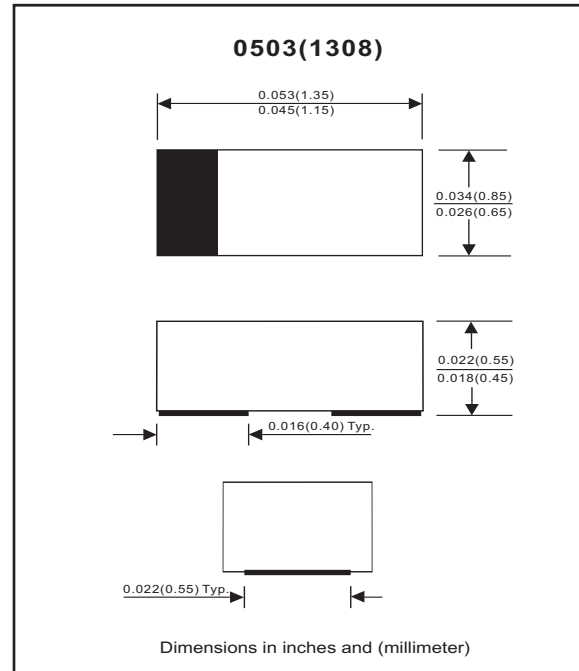


Features

- Uni-directional ESD protection
- IEC 61000-4-2 15kV(contact), 20kV(air).
- Working voltage:5V
- Ultra small SMD package:0503.
- High component density.

Mechanical data

- Case:0503 (1308) Standard package , molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking Code: Cathode band & E05
- Mounting position: Any.
- Weight: 0.0011 gram (approx.).



Maximum Rating AND Electrical Characteristics (at TA=25 °C unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-------------------------|---|------------------|-----|-----|-------------|------|
| Forward voltage | I _F = 10mA | V _F | | 0.8 | | V |
| Diode breakdown voltage | I _R = 1mA | V _{BD} | 6 | | | V |
| Leakage current | V _R = 5V | I _L | | 0.3 | 2.0 | uA |
| Junction capacitance | V _R = 0V, f = 1MHz | C _T | | 90 | 120 | pF |
| ESD capability | IEC 61000-4-2(air) IEC 61000-4-2(contact) | ESD | | | 20 15 | kV |
| Clamping voltage | I _{PP} = 5A, T _P =8/20us I _{PP} = 16A, T _P =8/20us | V _C | | | 9.8 12.5 | V |
| Peak pulse power | | P _{PP} | | | 200 | W |
| Operation temperature | | T _J | | | 125 | °C |
| Storage temperature | | T _{STG} | -55 | | 150 | °C |

RATING AND CHARACTERISTIC CURVES (CPDERT5V0U)

Fig. 1 - 8/20us Peak pulse current wave form acc. IEC 61000-4-5

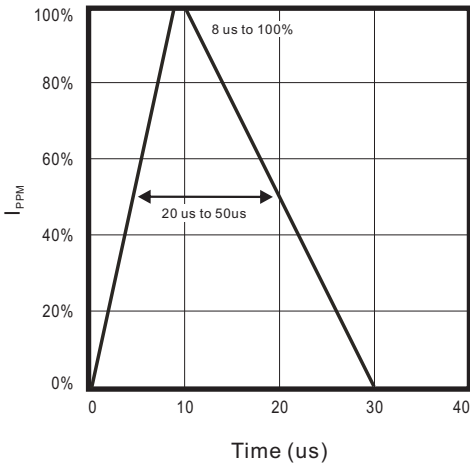


Fig. 2 - Power rating derating curve

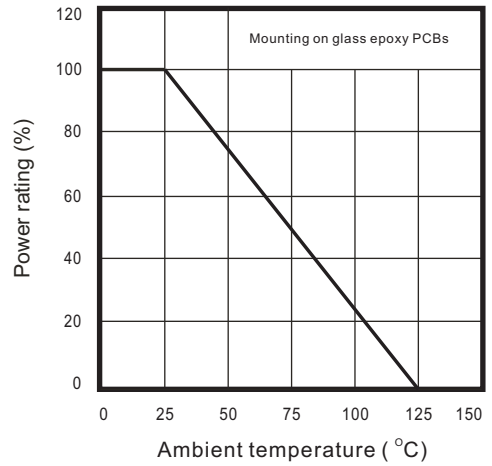


Fig. 3 - Clamping voltage vs. peak pulse current

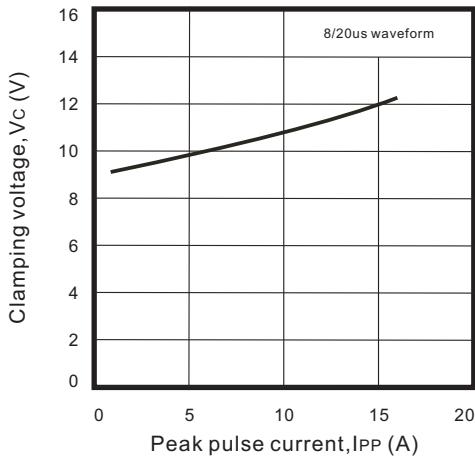


Fig. 4 - Forward voltage vs. forward current

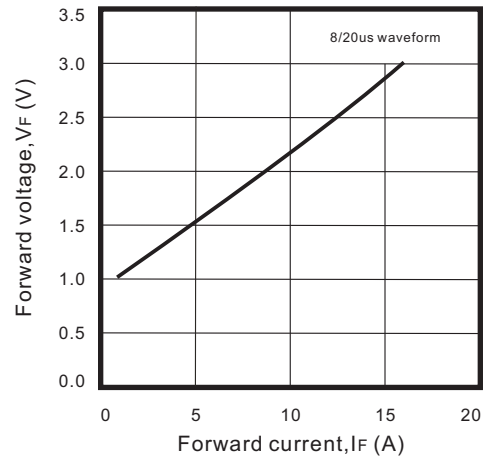


Fig. 5 - Capacitance between terminals characteristics

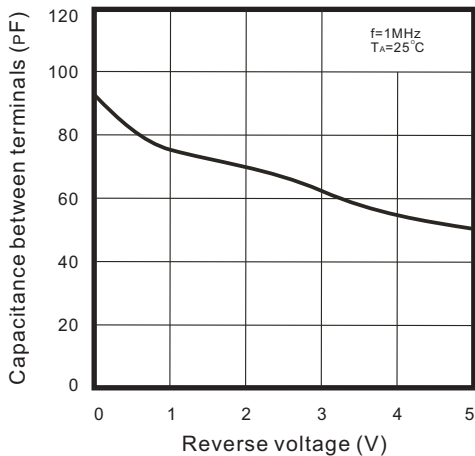


Fig. 6 - ESD Clamping (8kv Contant per IEC 61000-4-2)

