

CDSU101A (Lead-free Device)

High Speed



Features

Designed for mounting on small surface.

Extremely thin/leadless package.

Low leakage current (<50nA).

High mounting capability, strong surge withstand, high reliability.

Mechanical data

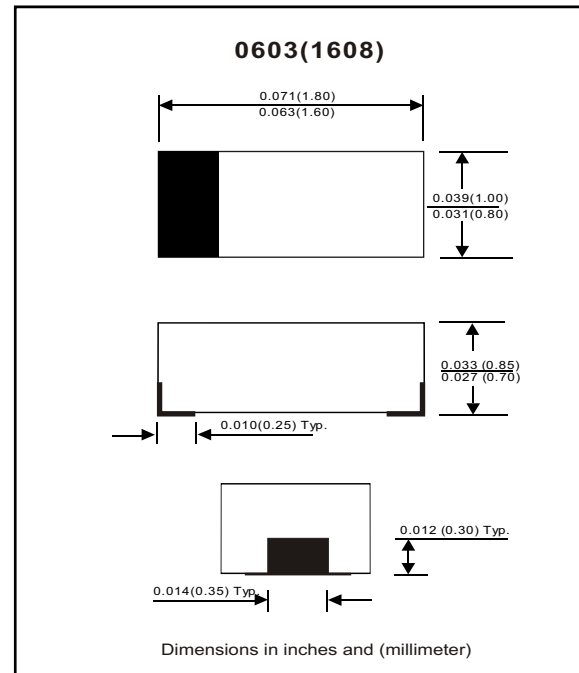
Case: 0603 (1608) standard package, molded plastic.

Terminals: Gold plated, solderable per MIL-STD-750, method 2026.

Polarity: Indicated by cathode band.

Mounting position: Any.

Weight: 0.003 gram (approximately)



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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|---------------------------------|---|------------------|-----|------|------|------|
| Repetitive peak reverse voltage | | V _{RRM} | | | 90 | V |
| Reverse voltage | | V _R | | | 80 | V |
| Average forward current | | I _O | | | 100 | mA |
| Forward current , surge peak | 8.3 ms single half sine-wave superimposed on rate load (JEDEC method) | I _{FSM} | | 1000 | | mA |
| Power Dissipation | | P _D | | | 150 | mW |
| Storage temperature | | T _{STG} | -40 | | +125 | °C |
| Junction temperature | | T _j | -40 | | +125 | °C |

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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-------------------------------|--|-----------------|-----|-----|-----|------|
| Forward voltage | I _F = 100 mA DC | V _F | | | 1.0 | V |
| Reverse current | V _R = 75 V | I _R | | | 50 | nA |
| Capacitance between terminals | f = 1MHz, and 0.5VDC reverse voltage | C _T | | 3 | | pF |
| Reverse recovery time | V _R = 6V, I _F = 10 mA, R _L =50 ohms | T _{rr} | | 4 | | nS |

RATING AND CHARACTERISTIC CURVES (CDSU101A)

Fig. 1 - Forward characteristics

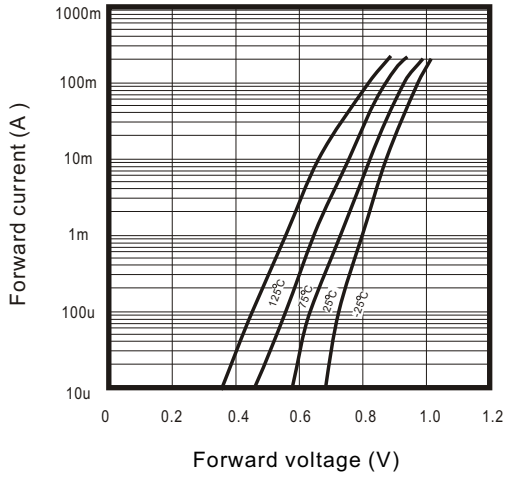


Fig. 2 - Reverse characteristics

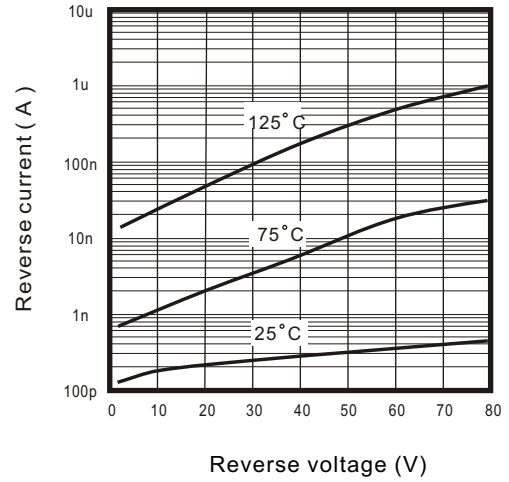


Fig. 3 - Capacitance between terminals characteristics

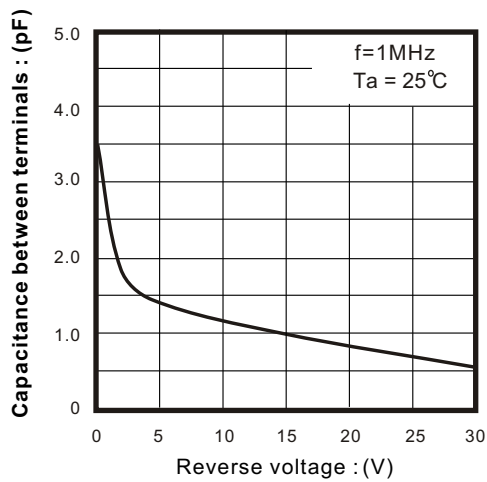


Fig. 4 - Current derating curve

