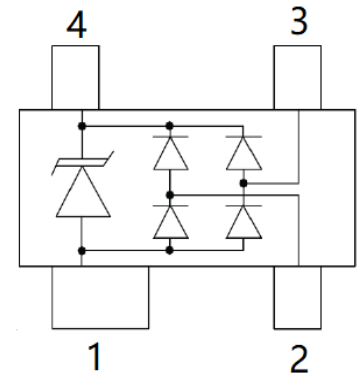




SR05 TVS Diode Array

Features

- ◆ 150 Watts peak pulse power ($t_p = 8/20\mu s$)
- ◆ Transient protection for high speed data lines to IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ Working voltages : 5V
- ◆ Protects two I/O lines
- ◆ Low operating and clamping voltages
- ◆ Solid-state silicon avalanche technology



SOT-143

Applications

- ◆ Notebooks, Desktops, Servers and Video Graphics Cards
 - ◆ USB Power & Data Line Protection
 - ◆ Monitors and Flat Panel Displays
 - ◆ I²C Bus Protection
 - ◆ Portable Instrumentation
 - ◆ Set Top Box
- Marking : R05

Maximum Rating @ $T_a=25^\circ C$ unless otherwise specified

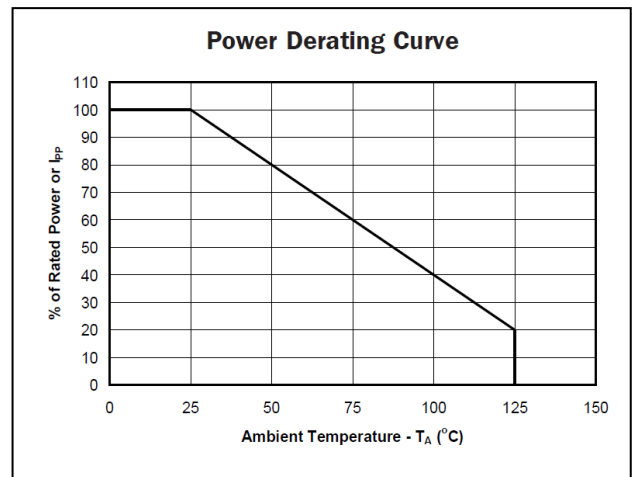
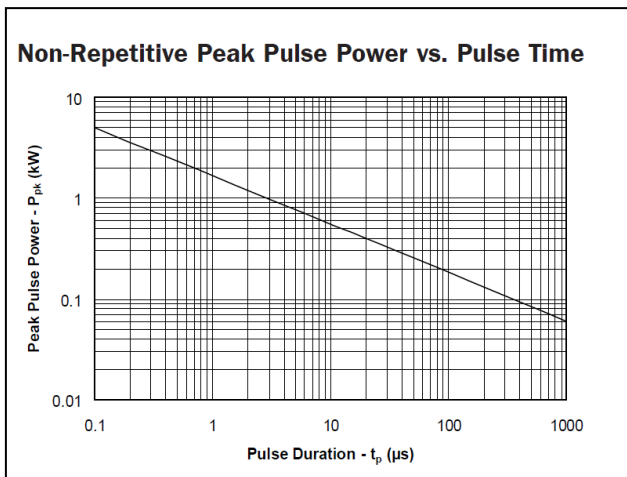
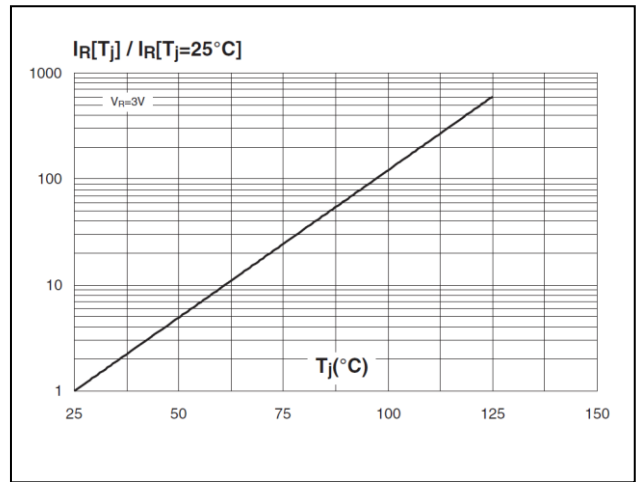
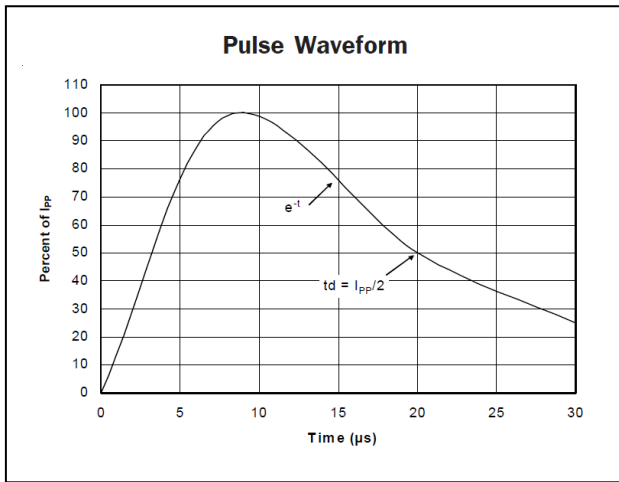
| Symbol | Parameter | Ratings | Units |
|-----------|--|-------------|------------|
| P_{PK} | Peak Pulse Power ($t_p = 8/20\mu s$) | 150 | Watts |
| T_L | Lead Soldering Temperature | 260(10sec.) | $^\circ C$ |
| T_J | Operating Temperature | -55 to +125 | $^\circ C$ |
| T_{STG} | Storage Temperature | -55 to +150 | $^\circ C$ |



Electrical Characteristics@ Ta=25°C unless otherwise

| Symbol | Parameter | Conditions | Min. | Typ. | Max. | Units |
|------------------|---------------------------|---|------|------|------|-------|
| V _{RRM} | Reverse Working Voltage | Any I/O to Ground | | | 5 | V |
| V _{BR} | Reverse Breakdown Voltage | I _T = 1mA, Any I/O to Ground | 6 | | | V |
| I _R | Reverse Leakage Current | V _{RRM} = 5V, Any I/O to Ground | | | 1 | μA |
| V _C | Clamping Voltage | I _{PP} = 1A, t _p = 8/20μs, any I/O pin to Ground | | | 15.5 | V |
| | | I _{PP} = 4A, t _p = 8/20μs, any I/O pin to Ground | | | 20 | V |
| C _J | Junction Capacitance | V _R = 0V, f = 1MHz, between I/O pins | | 0.3 | 0.6 | pF |
| | | V _R = 0V, f = 1MHz, any I/O pin to Ground | | 0.6 | 1 | pF |

Typical Characteristics@ Ta=25°C unless otherwise specified





Package Outline

Plastic surface mounted package

SOT-143

