

Features

- Fails short circuit when surged in excess of ratings
- Low voltage overshoot
- High repetitive surge current capability
- Low on - state voltage
- P0080TA~P3500TA are also available in SMA package



**DO-214AC
(SMA)**

Main Applications

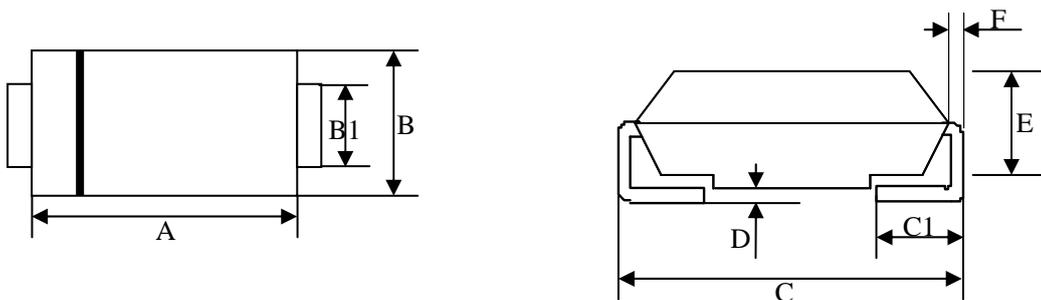
- Customer Premises Equipment (CPE)
- Modems, Line cards, DSL, ISDN, T - 1/E - 1
- Data lines and security systems
- Fax machines, Telephones etc.

Thermal Considerations

| Type Number | Symbol | Value | Units |
|--|-----------------|--------------|-------|
| Operating Junction Storage Temperature Range | $T_{J, TG}$ | -40 to + 150 | °C |
| Storage Temperature Range | T_S | -40 to + 150 | °C |
| Thermal Resistance: Junction to Ambient | $R_{\theta JA}$ | 120 | °C/W |

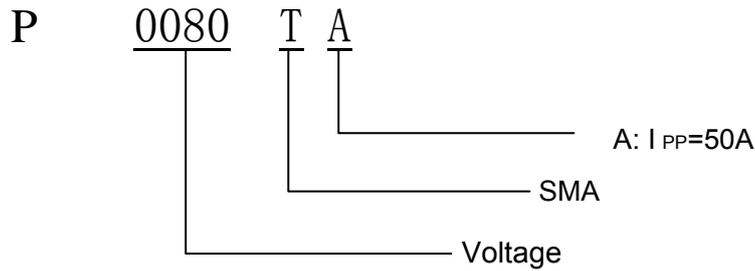
Package Dimensions

DO-214AC/SMA



| Dim | | A | B | B1 | C | C1 | D | E | F |
|---------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Millimeters (mm) | Min | 3.99 | 2.54 | 1.25 | 4.93 | 0.76 | - | 1.98 | 0.152 |
| | Max | 4.50 | 2.79 | 1.65 | 5.28 | 1.52 | 0.203 | 2.29 | 0.305 |
| Inches (inch) | Min | 0.157 | 0.100 | 0.049 | 0.194 | 0.030 | - | 0.078 | 0.006 |
| | Max | 0.177 | 0.110 | 0.065 | 0.208 | 0.060 | 0.008 | 0.090 | 0.012 |

Ordering Information



Electrical Characteristics (*T_{Ambient}*=25°C unless noted otherwise)

| Part Number | V _{DRM} | V _S | I _H | I _S | I _T | V _T | C _o |
|-------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | V min | V max | mA min | mA max | A max | V max | pF |
| P0080TA | 6 | 25 | 50 | 800 | 2.2 | 4 | 50 |

Surge Ratings

| Series | I _{PP} 2x10μS Amps | I _{PP} 8x20μS Amps | I _{PP} 10x160μS Amps | I _{PP} 10x560μS Amps | I _{PP} 10x1000μS Amps | I _{TSM} 50/60Hz Amps | di/dt Amps/μS |
|--------|-----------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|------------------|
| A | 150 | 150 | 90 | 50 | 45 | 20 | 500 |

Note: 1. Peak pulse current rating (I_{PP}) is non - repetitive and guaranteed for the life of the product.

2. I_{PP} ratings applicable over temperature range of - 40°C to +85°C

3. The device must initially be in thermal equilibrium with - 40°C < T_J < +150°C

4. Current waveform and voltage waveform in μS.

Typical Characteristics Curves

Fig 1. V-I Characteristics

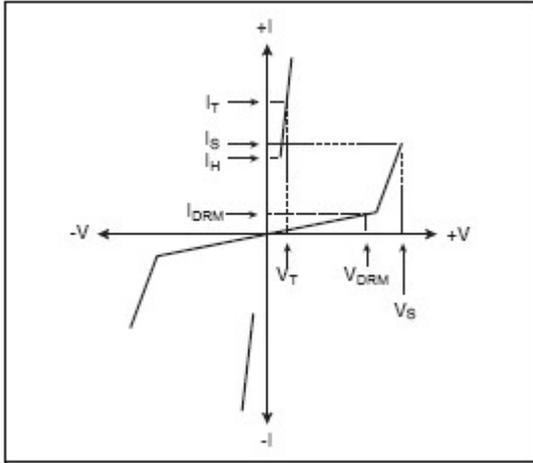


Fig 2. $t_r \times t_d$ Pulse Wave-form

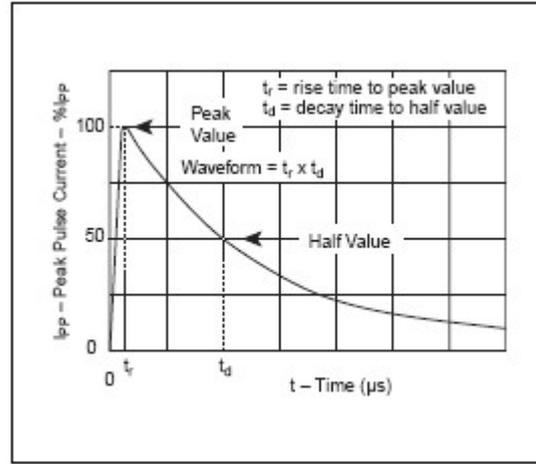


Fig 3. Normalized V_S Change versus Junction Temperature

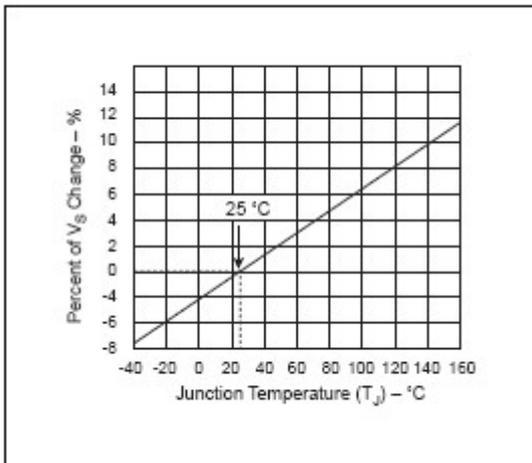


Fig 4. Normalized DC Holding Current Versus Case Temperature

