

DESCRIPTION

DO-214AA/SMB Thyristor solid state protection thyristor protect telecommunications equipment such as modems, line cards, fax machines, and other CPE. This Series devices are used to enable equipment to meet various regulatory requirements including GR1089, ITUK.20, K.21 and K.45, IEC 60950, and TIA-968 (formerly known as FCC Part 68).

FEATURES

- > Excellent capability of absorbing transient surge
- > Quick response to surge voltage
- > Eliminates overvoltage caused by fast rising transients
- > Solid-state silicon technology, non degenerative

APPLICATIONS

- > Audio/Video line
- > Network and telecom
- > Data lines and security systems
- > Serial ports



DO-214AA PACKAGE



SCHEMATIC SYMBOL

PART NUMBER AND ELECTRICAL PARAMETER@25°C UNLESS OTHERWISE SPECIFIED

| PART NUMBER | V _{DRM} V Min. | I _{DRM} uA Max. | V _s V Max. | I _s mA | V _T V Max. | I _T A | I _H mA Min. | C _o pF Typ. |
|-------------|-------------------------------|--------------------------------|-----------------------------|----------------------|-----------------------------|---------------------|------------------------------|------------------------------|
| P0060SC | 6 | 5 | 15 | 800 | 4 | 2.2 | 50 | 80 |
| P0080SC | 6 | 5 | 25 | 800 | 4 | 2.2 | 50 | 80 |
| P0150SC | 15 | 5 | 25 | 800 | 4 | 2.2 | 50 | 80 |
| P0300SC | 25 | 5 | 40 | 800 | 4 | 2.2 | 50 | 80 |
| P0640SC | 58 | 5 | 77 | 800 | 4 | 2.2 | 120 | 80 |
| P0720SC | 65 | 5 | 88 | 800 | 4 | 2.2 | 120 | 80 |
| P0900SC | 75 | 5 | 98 | 800 | 4 | 2.2 | 120 | 80 |
| P1100SC | 90 | 5 | 130 | 800 | 4 | 2.2 | 120 | 80 |
| P1300SC | 120 | 5 | 160 | 800 | 4 | 2.2 | 120 | 80 |
| P1500SC | 140 | 5 | 180 | 800 | 4 | 2.2 | 120 | 80 |
| P1800SC | 170 | 5 | 220 | 800 | 4 | 2.2 | 120 | 80 |
| P2300SC | 190 | 5 | 260 | 800 | 4 | 2.2 | 120 | 80 |
| P2600SC | 220 | 5 | 300 | 800 | 4 | 2.2 | 120 | 80 |
| P3100SC | 275 | 5 | 350 | 800 | 4 | 2.2 | 120 | 40 |
| P3500SC | 320 | 5 | 400 | 800 | 4 | 2.2 | 120 | 40 |
| P4200SC | 400 | 5 | 520 | 800 | 4 | 2.2 | ≤50 | 70 |

- 1、 V_s is measured at 100KV/S
- 2、 Off-state capacitance is measured in V_{DC}=2V, V_{RMS}=1V, F=1MHz
- 3、 All measurements are made at an ambient temperature of 25°C



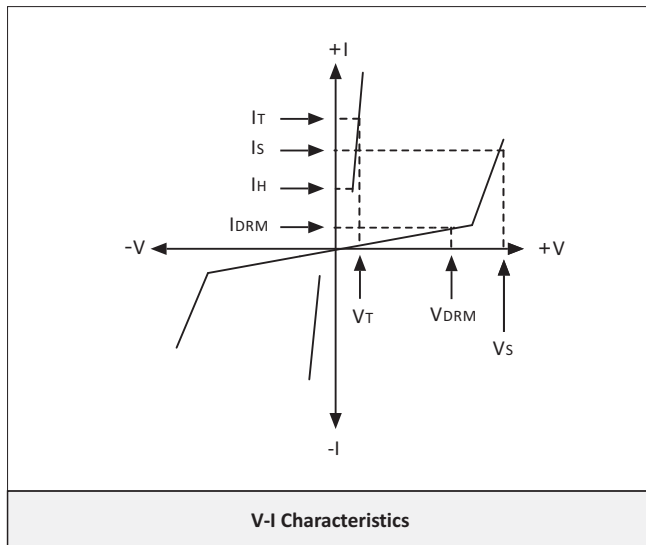
SURGE RATINGS

| Series | IPP 2x10us (A) | IPP 8x20us (A) | IPP 10x560us (A) | IPP 10x1000us (A) | VPP 10x700us (V) | I _{TSM} 60Hz (A) | di/dt (A/us) |
|----------------------------|----------------------|----------------------|------------------------|-------------------------|------------------------|---------------------------------|-----------------|
| P0060SC Thru P4200SC | 500 | 400 | 150 | 100 | 6000 | 30 | 500 |

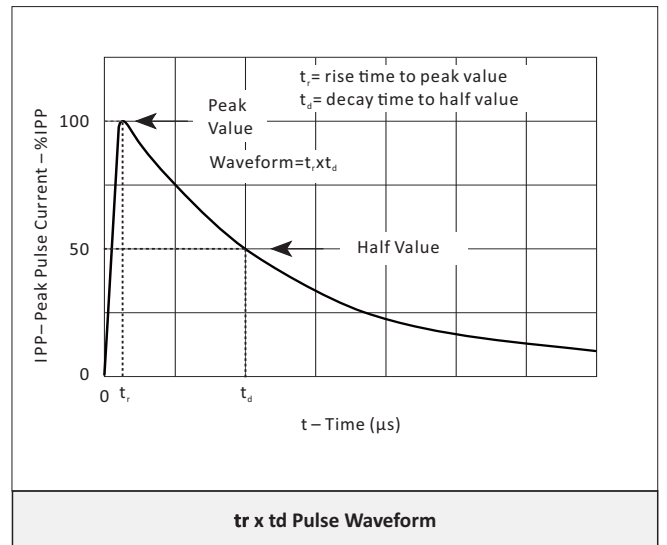
THERMAL CONSIDERATIONS

| Symbol | Parameter | Value | Unit |
|------------------|--|-------------|------|
| T _J | Operating Junction Temperature | -40 to +150 | °C |
| T _S | Storage Temperature Range | -40 to +150 | °C |
| R _{θJA} | Junction to Ambient on printed circuit | 90 | °C/W |

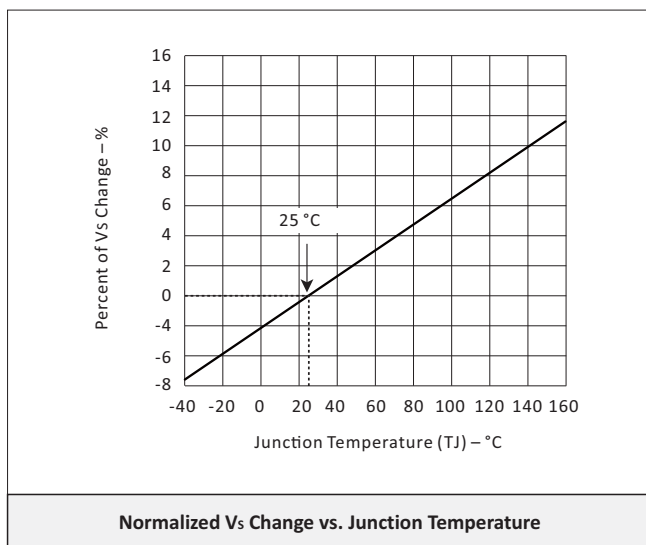
TYPICAL DEVICE CHARACTERISTICS



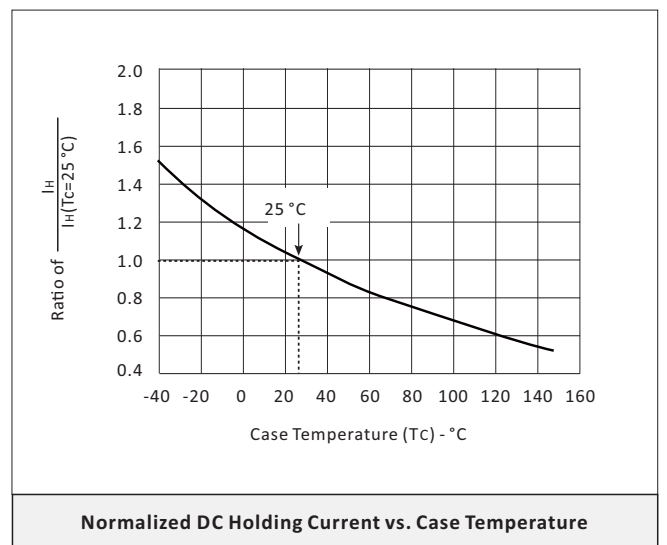
V-I Characteristics



tr x td Pulse Waveform



Normalized V_S Change vs. Junction Temperature



Normalized DC Holding Current vs. Case Temperature



DO-214AA(SMB) PACKAGE DIMENSIONS

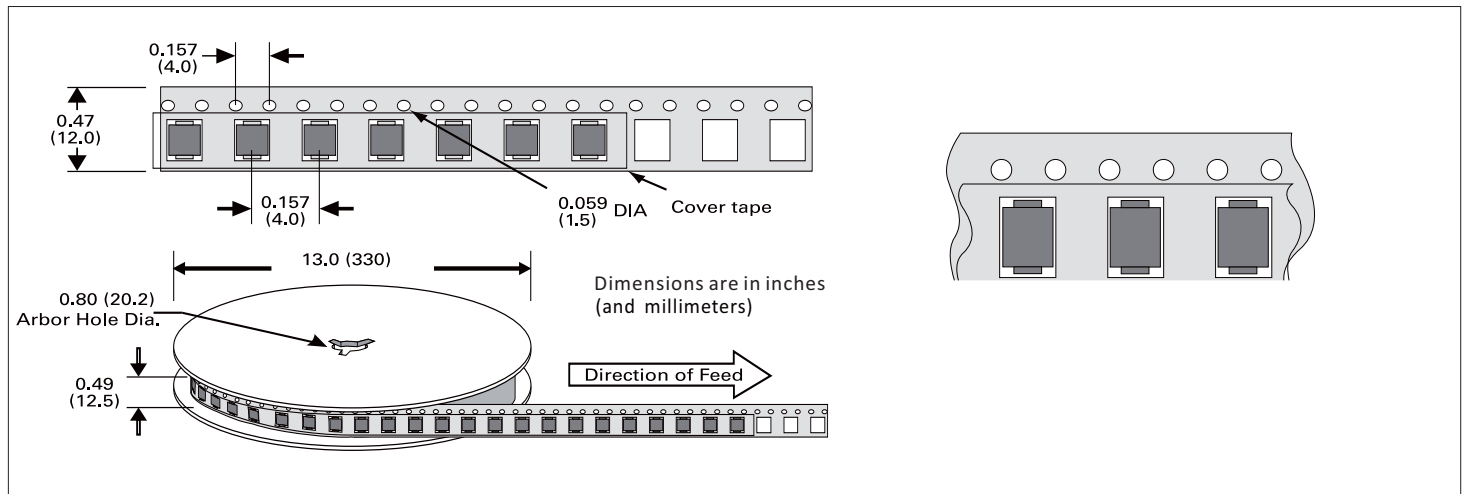
| SMB PACKAGE DIMENSIONS | | | | |
|------------------------|-------------|------|--------|-------|
| DIM | MILLIMETERS | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 1.96 | 2.20 | 0.077 | 0.087 |
| B | 4.35 | 4.85 | 0.171 | 0.191 |
| C | 3.30 | 3.94 | 0.130 | 0.155 |
| D | 2.20 | 2.50 | 0.087 | 0.098 |
| E | 0.76 | 1.52 | 0.030 | 0.060 |
| F | 0.02 | 0.20 | 0.001 | 0.008 |
| G | 5.08 | 5.59 | 0.200 | 0.220 |
| H | 0.15 | 0.30 | 0.006 | 0.012 |

NOTES:
1. Dimensions are exclusive of mold flash and metal burrs

RECOMMENDED PAD LAYOUT DIMENSIONS

| RECOMMENDED PAD LAYOUT DIMENSIONS | | | | |
|-----------------------------------|-------------|------|-----------|-------|
| DIM | MILLIMETERS | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 2.20 | - | 0.087 | - |
| B | 1.45 | - | 0.057 | - |
| C | - | 2.55 | - | 0.100 |
| D | 1.45 | - | 0.057 | - |
| E | 5.60 REF | | 0.220 REF | |

TAPE AND REEL SPECIFICATION



CONTACT US

Headquarters

No.3387 Shendu Road Pujiang I&E Park Minhang Shanghai
China

Hotline

400-021-5756

Web

[Http://www.semiware.com.cn](http://www.semiware.com.cn)

By Telephone

General: 86-21-3463-7172

Sales: 86-21-3463-7345

Technical Support: 86-21-34637172-8811

By Fax

General: 86-21-3965-0654

Sales: 86-21-3463-7458

By Email

General: china@semiware.com.cn

Sales: sales33@semiware.com.cn

Technical Support: fae03@semiware.com.cn

COPYRIGHT ©Semiware 2017 - This literature is subject to all applicable copyright laws and is not for resale in any manner.

SPECIFICATIONS: Semiware reserves the right to change the electrical and or mechanical characteristics described herein without notice.

DESIGN CHANGES : Semiware reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance.Semiware assumes no responsibility with respect to the selection or specifications of such products.Semiware makes no warranty,representation or guarantee regarding the suitability of its products for any particular purpose, nor does Semiware assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special,consequential or incidental damages.

LIFE SUPPORT POLICY: Semiware products are not authorized for use in life support systems without written consent from the factory



单击下面可查看定价，库存，交付和生命周期等信息

[>>SEMIWARE\(赛米微尔\)](#)