

DESCRIPTION

DO-214AC(SMA) 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-214AC(SMA) PACKAGE



SCHEMATIC SYMBOL

PART NUMBER AND ELECTRICAL PARAMETER @ T=25°C RH = 45%-75%

PART NUMBER	V _{DRM} V Min.	I _{DRM} uA Max.	V _s V Max.	I _s mA	V _r V Max.	I _r A	I _h mA Min.	C _o pF Typ.
P0060TA	6	5	15	800	4	2.2	40	50
P0080TA	6	5	25	800	4	2.2	40	50
P0150TA	15	5	25	800	4	2.2	40	50
P0300TA	25	5	40	800	4	2.2	40	70
P0640TA	58	5	77	800	4	2.2	120	50
P0720TA	65	5	88	800	4	2.2	120	50
P0900TA	75	5	98	800	4	2.2	120	45
P1100TA	90	5	130	800	4	2.2	120	45
P1300TA	120	5	160	800	4	2.2	120	45
P1500TA	140	5	180	800	4	2.2	120	40
P1800TA	170	5	220	800	4	2.2	120	40
P2300TA	190	5	260	800	4	2.2	120	35
P2600TA	220	5	300	800	4	2.2	120	35
P3100TA	275	5	350	800	4	2.2	120	30
P3500TA	320	5	400	800	4	2.2	120	30
P4200TA	400	5	520	800	4	2.2	≤50	30

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



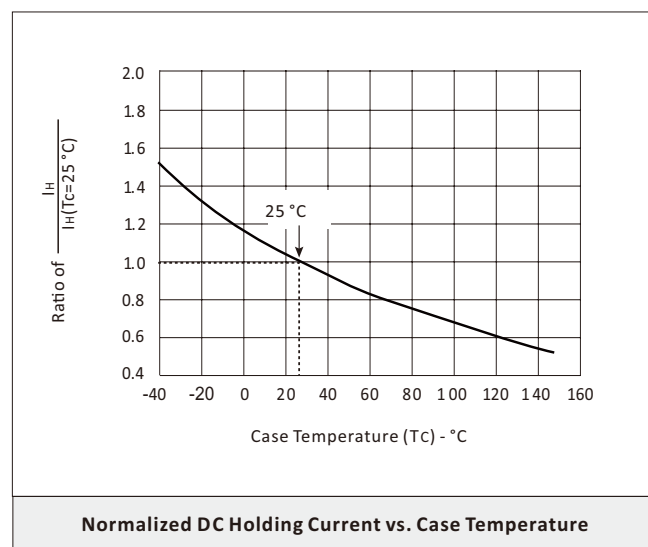
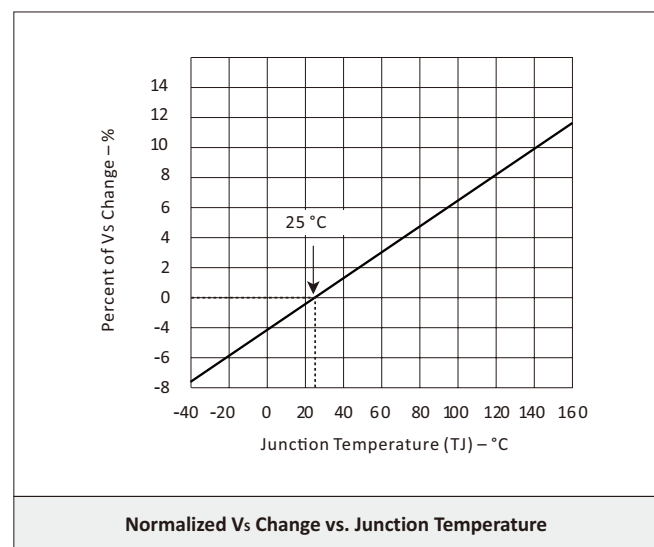
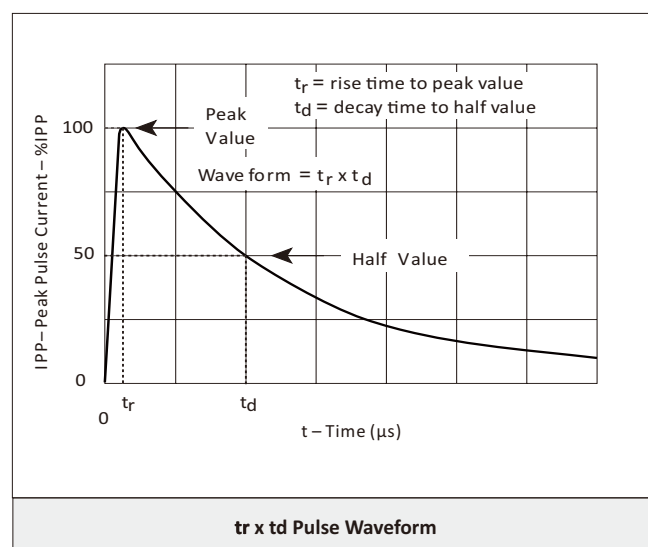
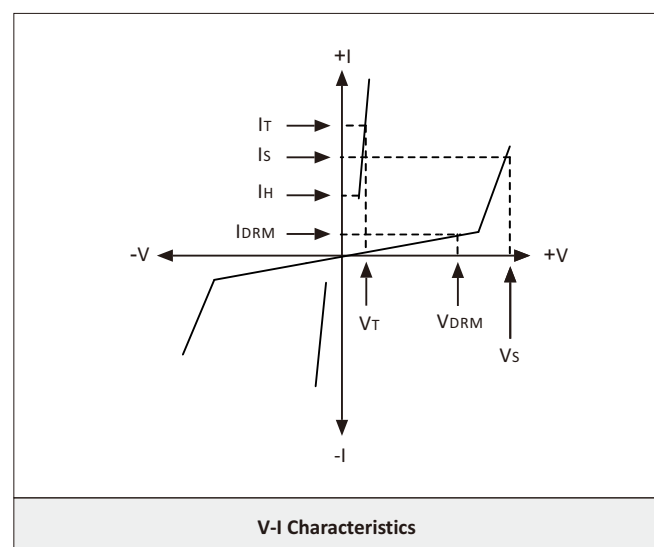
SURGE RATINGS

Series	IPP 2x10us (A)	IPP 8x20us (A)	IPP 10x560us (A)	IPP 10x1000us (A)	VPP 10x700us (V)	I _{TSM} 60Hz (A)	di/dt (A/us)
P0060TA Thru P4200TA	150	150	50	45	3000	20	500

THERMAL CONSIDERATIONS

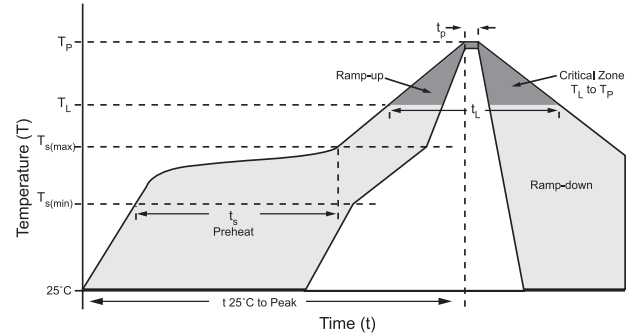
Symbol	Parameter	Value	Unit
T _J	Operating Junction Temperature	-55 to +150	°C
T _S	Storage Temperature Range	-55 to +150	°C
R _{θJA}	Junction to Ambient on printed circuit	120	°C/W

TYPICAL DEVICE CHARACTERISTICS

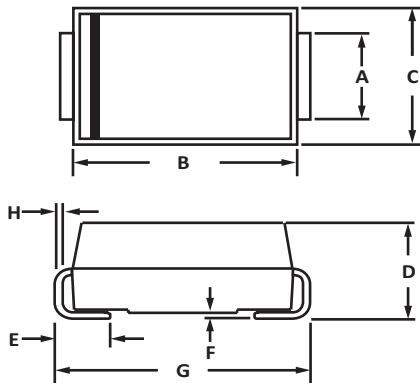


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60–180 secs
Average ramp up rate (Liquidus Temp (TL) to peak		3°C/second max
Ts(max) to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	Time (min to max) (tL)	60–150 seconds
Peak Temperature (TP)		260°C
Time within 5°C of actual peak Temperature (tp)		20–40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (TP)		8 minutes Max.
Do not exceed		260°C



DO-214AC(SMA) PACKAGE DIMENSION

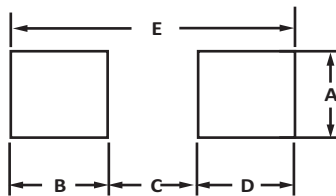


DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.23	1.80	0.048	0.071
B	3.90	4.60	0.154	0.181
C	2.50	2.80	0.102	0.110
D	1.90	2.45	0.075	0.096
E	0.75	1.52	0.030	0.060
F	0.02	0.20	0.001	0.008
G	4.80	5.30	0.189	0.209
H	0.15	0.30	0.006	0.012

NOTES:

1. Dimensions are exclusive of mold flash and metal burrs

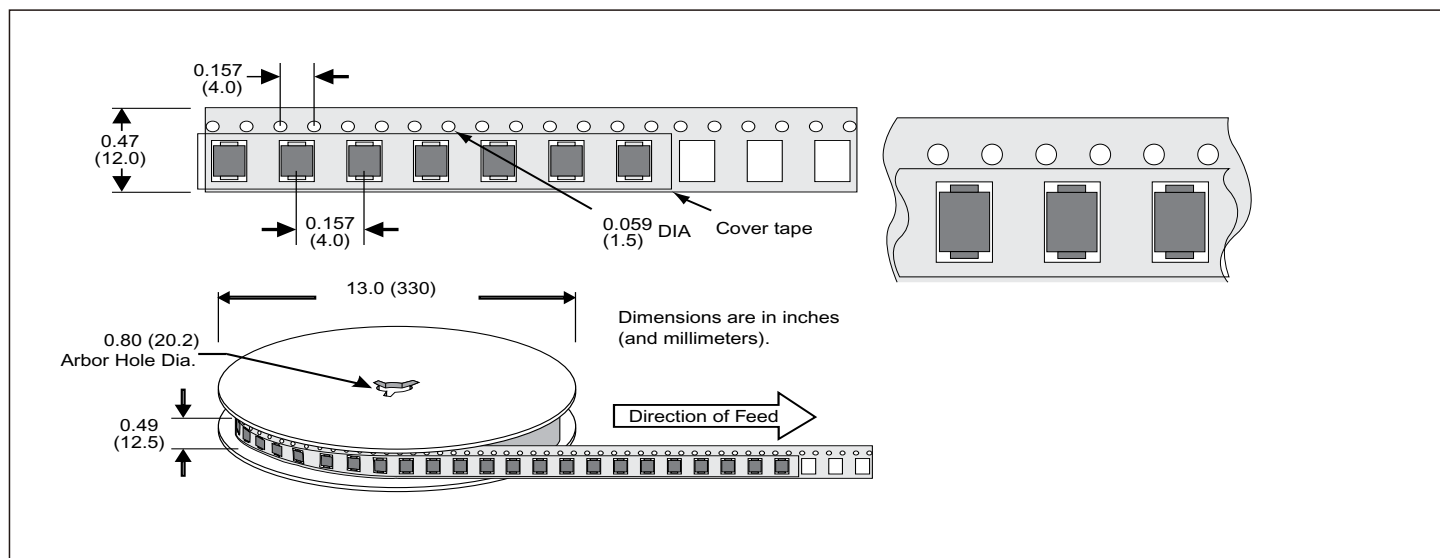
RECOMMENDED PAD LAYOUT DIMENSION



RECOMMENDED PAD LAYOUT DIMENSION				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.63	-	0.064	-
B	1.45	-	0.057	-
C	-	2.28	-	0.090
D	1.45	-	0.057	-
E	5.28 REF		0.208 REF	



TAPE AND REEL SPECIFICATION



ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
PxxxxTA	DO-214AC(SMA)	5000PCS	13"



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 Email

General: china@semiware.com.cn

Sales: sales33@semiware.com.cn

Technical Support: fae01@semiware.com.cn

By Fax

General: 86-21-3965-0654

Sales: 86-21-3463-7458

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

