

## Thyristor Surge Suppressors (TSS) Data Sheet

### Description

DO-214AC Thyristor solid state protection thyristor protect telecommunications equipment such as modems, line cards, fax machines, and other CPE.

Cilicom P Series devices are used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA-968 (formerly known as FCC Part 68).

### Features

- Cannot be damaged by voltage
- Eliminate hysteresis and heat dissipation typically found with clamping devices
- Eliminate voltage overshoot caused by fast-rising transients
- Are non-degenerative
- Will not fatigue
- Have low capacitance, making them ideal for high-speed transmission equipment
- Meets MSL level 1, per J-STD-020.

### Mechanical Data

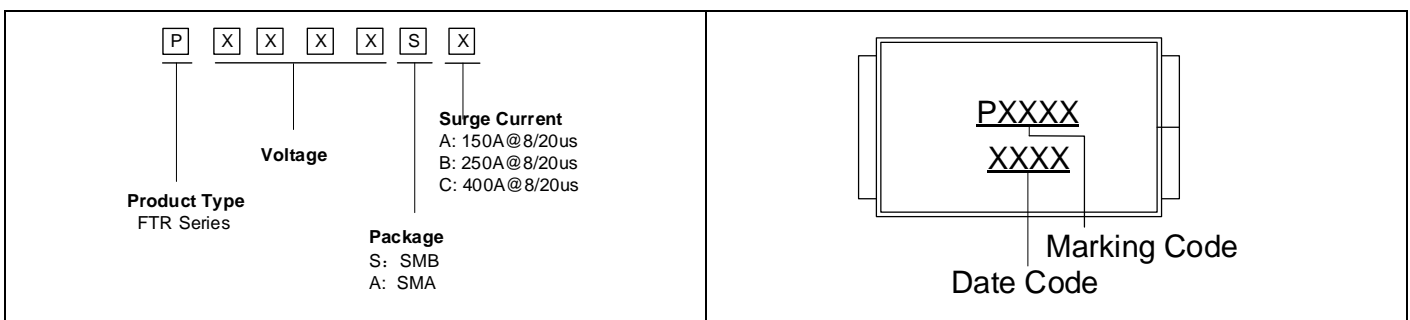
- Case: JEDEC DO-214AAMoulded plastic
- Terminal:solderplated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode except bi-directional models
- Mounting Position: Any

### Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak pulse current of at 10/1000µs waveform (Note 1, Fig.3)	$I_{PPM}$	See Table	Amps
Operating junction and Storage Temperature Range.	$T_J, T_{STG}$	-55 to +125	°C
Typical thermal resistance junction to ambient	$R_{\theta JA}$	120	°C/W

### Partnumber code



## Dimensions (DO-214AC/SMA)

Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
L	3.90	4.50	0.154	0.177
D	2.40	2.80	0.094	0.110
D1	1.30	1.70	0.051	0.067
T	4.80	5.30	0.189	0.208
T1	0.76	1.52	0.030	0.060
d	0.10	0.20	0.003	0.008
H	2.00	2.50	0.078	0.098

## Electrical Characteristics (T<sub>A</sub>=25°C)

Part Number	V <sub>DRM</sub> (V)	V <sub>S</sub> (V)	V <sub>T</sub> (V)	I <sub>DRM</sub> (uA)	I <sub>S</sub> (mA)	I <sub>T</sub> (A)	I <sub>H</sub> (mA)	C <sub>o</sub> (pF)	Marking
P0800AA	6	25	4	5	800	2.2	50	50	P008A
P0300AA	25	40	4	5	800	2.2	50	70	P03A
P0640AA	58	77	4	5	800	2.2	150	50	P06A
P0720AA	65	88	4	5	800	2.2	150	50	P07A
P0900AA	75	98	4	5	800	2.2	150	45	P09A
P1100AA	90	130	4	5	800	2.2	150	45	P11A
P1300AA	120	160	4	5	800	2.2	150	45	P13A
P1500AA	140	180	4	5	800	2.2	150	40	P15A
P1800AA	170	220	4	5	800	2.2	150	40	P18A
P2300AA	190	260	4	5	800	2.2	150	35	P23A
P2600AA	220	300	4	5	800	2.2	150	35	P26A
P3100AA	275	350	4	5	800	2.2	150	30	P31A
P3500AA	320	400	4	5	800	2.2	150	30	P35A

Notes: Off-state capacitance(C<sub>O</sub>) is measured at 1 MHz with a 2V bias and is typical value.

## Surge Rating

Series	I <sub>PP</sub> 2×10μs (A)	I <sub>PP</sub> 8×20μs (A)	I <sub>PP</sub> 10×160μs (A)	I <sub>PP</sub> 10×560μs (A)	I <sub>PP</sub> 10×1000μs (A)	V <sub>PP</sub> 10×1000μs (KV)	I <sub>TSM</sub> 60Hz (A)	di/dt (A/μs)
A	150	150	90	50	45	2	20	500





