

## P4SMA18A



**DO-214AC (SMA)**  
Color Band Denotes Cathode  
Device Marking: 18A

### 400 Watt Unidirectional Transient Voltage Suppressor

#### Absolute Maximum Ratings (Note 1) $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$P_{PPM}$	Peak Pulse Power Dissipation on 10/1000 $\mu\text{s}$ waveform	400	W
$I_{PPM}$	Peak Pulse Current on 10/1000 $\mu\text{s}$ waveform	15.9	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current superimposed on rated load (JEDEC method) (Note 2)	40	A

Note 1: These ratings are limiting values above which serviceability of any semiconductor device may be impaired.

Note 2: Measured on 8.3ms single half-sine wave or equivalent square wave. Duty cycle = 4 pulses per minute maximum.

#### Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	120	$^\circ\text{C}/\text{W}$
$R_{\theta JL}$	Thermal Resistance from Junction to Leads	30	$^\circ\text{C}/\text{W}$
$T_{stg}$	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-65 to +150	$^\circ\text{C}$

#### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{BR}$	Breakdown Voltage at $I_T = 1.0\text{mA}$	17.1 - 18.9	V
$\alpha_T$	Maximum Temperature Coefficient of $V_{BR}$	0.089	$\%/^\circ\text{C}$
$V_{RWM}$	Reverse Stand-off Voltage	15.3	V
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$	1	$\mu\text{A}$
$V_C$	Maximum Clamping Voltage @ $I_{PPM}$	25.2	V