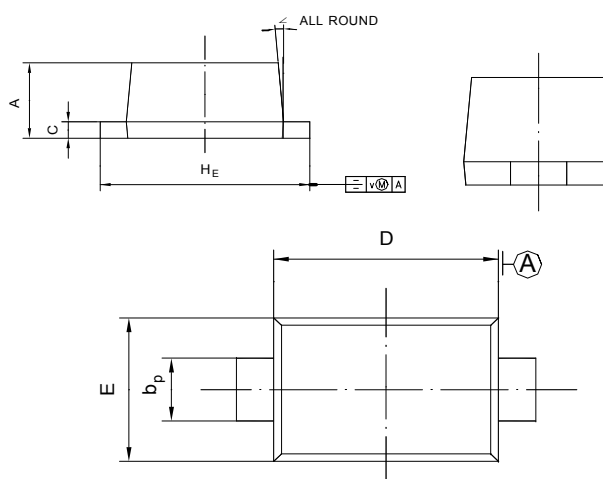


- ◇ Low Forward Voltage Drop
- ◇ SOD523 Micro SMD package
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking
- ◇ Surface Mount Package Ideally Suited for Automatic Insertion

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Dimensions in inches and (millimeters)

Maximum Ratings (T_a = 25 °C)

Symbol	Parameter	Value	Units
V _{RRM}	Repetitive Peak Reverse Voltage	40	V
I _{F(AV)}	Average Forward Rectified Current	1	A
I _{FSM}	Non-Repetitive Peak Forward Surge Current (@t=8..3ms)	6	A
T _J	Operating Junction Temperature	125	°C
T _{STG}	Storage Temperature Range	-50 to +125	°C

B5819WT

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Max	Units
V_F	Forward Voltage	$I_F = 0.3A$		0.5	V
		$I_F = 1A$		0.68	V
I_R	Reverse current	$V_R = 40V$		100	μA
V_{BR}	Reverse breakdown voltage	$I_R = 0.5mA$	40		V
C_T	Capacitance	$V_R = 0V, f = 1MHz$		100	pF

RATING AND CHARACTERISTIC CURVES (B5819WT)

Fig. 1 - Forward Current Derating Curve

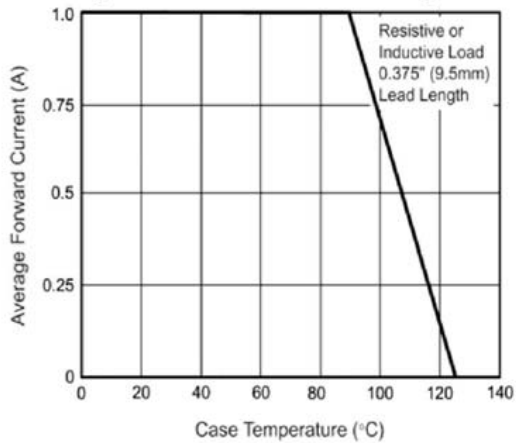


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

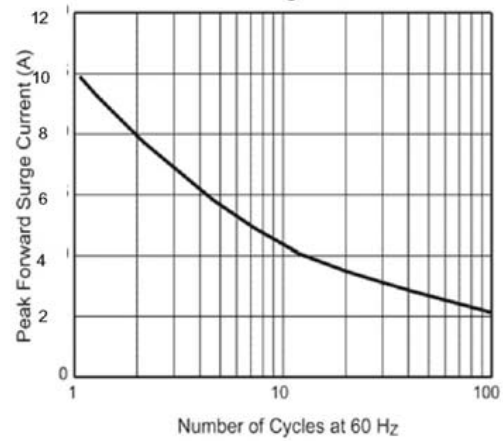


Fig. 3 - Typical Instantaneous Forward Characteristics

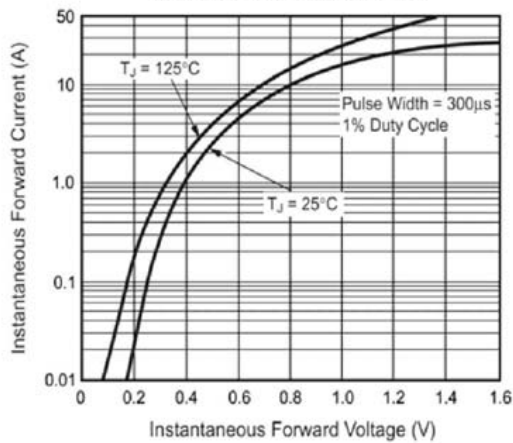


Fig. 4 - Typical Reverse Characteristics

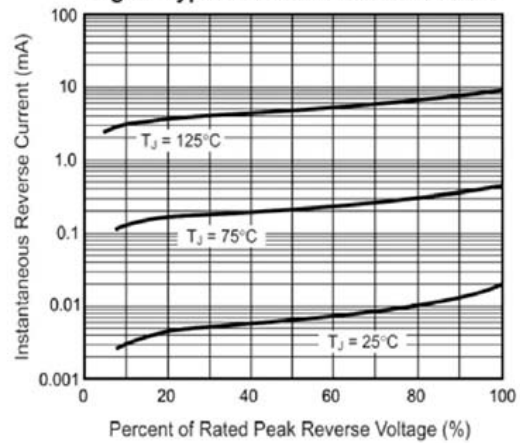


Fig. 5 - Typical Junction Capacitance

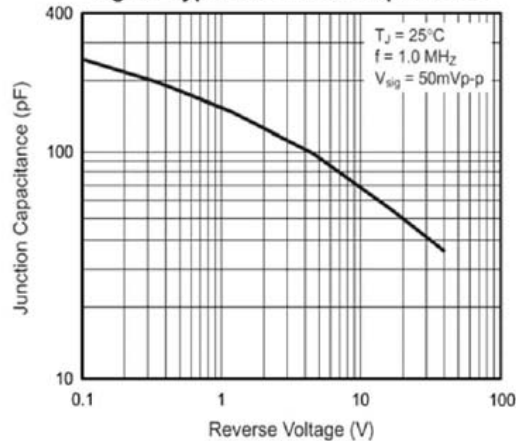


Fig. 6 - Typical Transient Thermal Impedance

