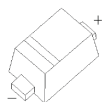


FEATURES

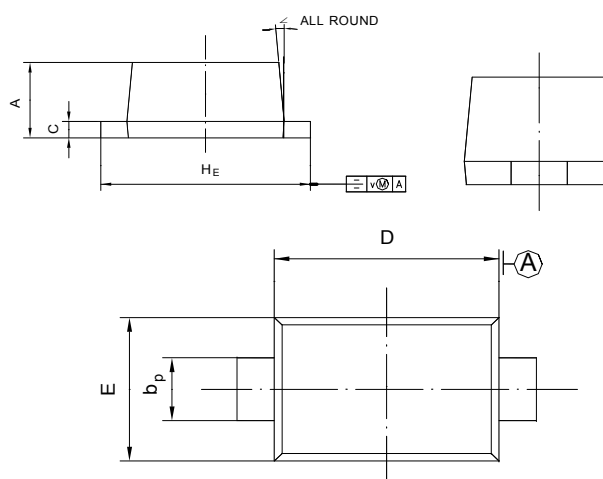
- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insetion

MARKING :S1



SOD-523

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

Dimensions in inches and (millimeters)

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Paramete	Value	Unit
V _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _{RRM}	Peak Repetitive Reverse Voltage	75	V
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	53	V
I _O	Average Rectified Output Current	200	mA
I _{FSM}	Non-Rpetitive Peak Forward Surge Current @t=8.3ms	1	A
P _D	Power Dissipation	225	mW
R _{ΘJA}	Thermal Resistance from Junction to Ambient	556	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

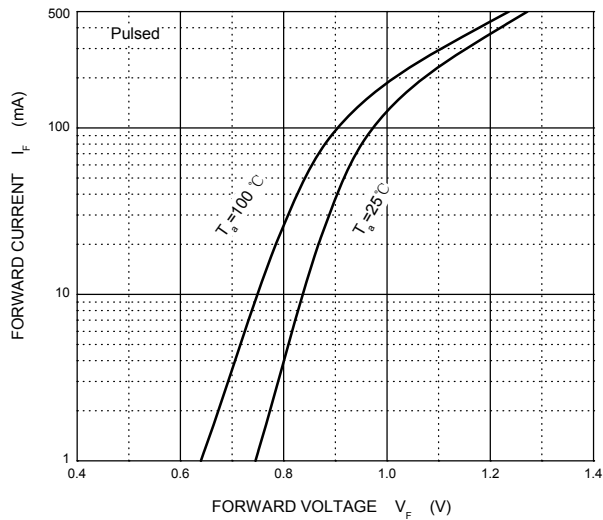
BAS716

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

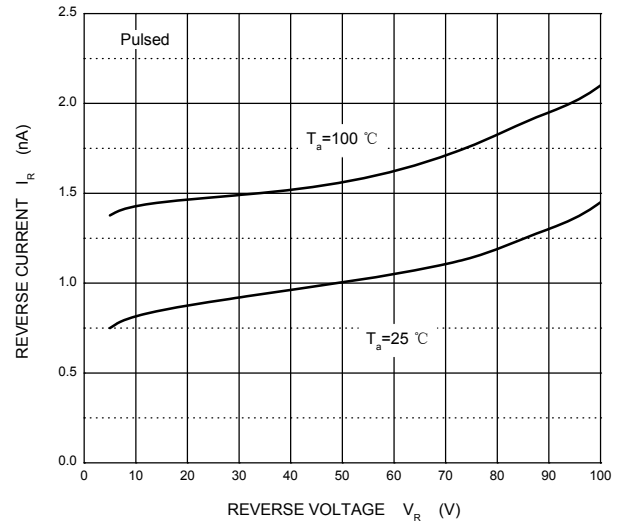
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	I_R	$V_R=75\text{V}$			5	nA
		$V_R=100\text{V}$			80	nA
Forward voltage	V_F	$I_F=1\text{mA}$			0.9	V
		$I_F=10\text{mA}$			1	V
		$I_F=50\text{mA}$			1.1	V
		$I_F=150\text{mA}$			1.25	V
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$		2		pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R$			3	μs

RATING AND CHARACTERISTIC CURVES (BAS716)

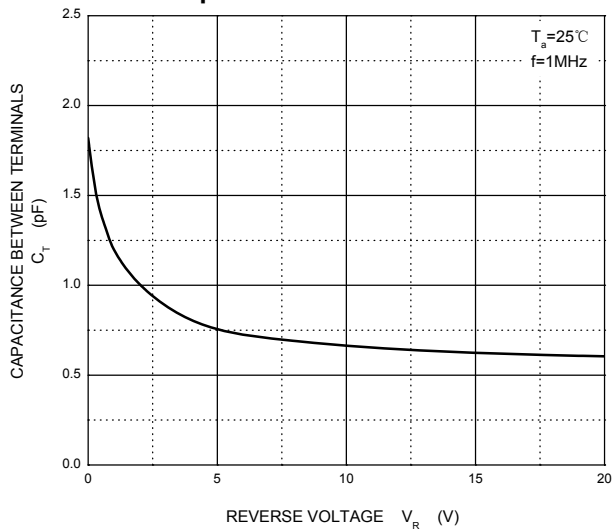
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

