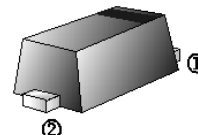


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching Speed
- Low Reverse Current
- For General Purpose Switching Applications
- High Conductance

SOD-523



MARKING

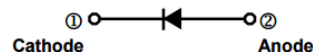
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PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	8K	7 inch

ORDER INFORMATION

Part Number	Type
BAS516S-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

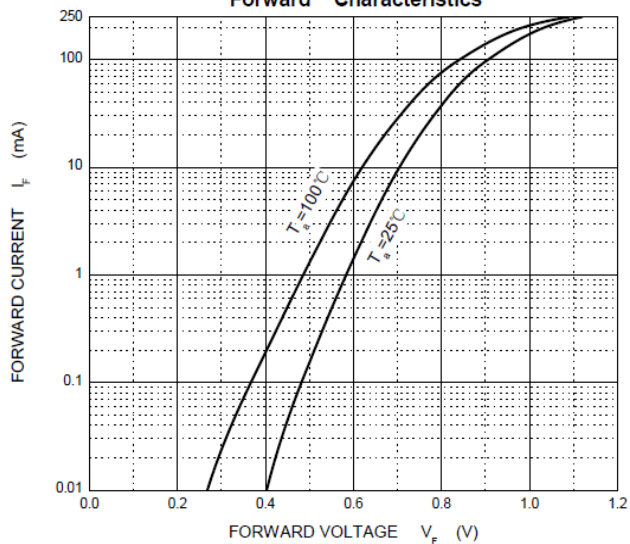
Parameter	Symbol	Ratings	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Average Rectified Output Current	I _O	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction-Ambient	R _{θJA}	833	°C/W
Junction, Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

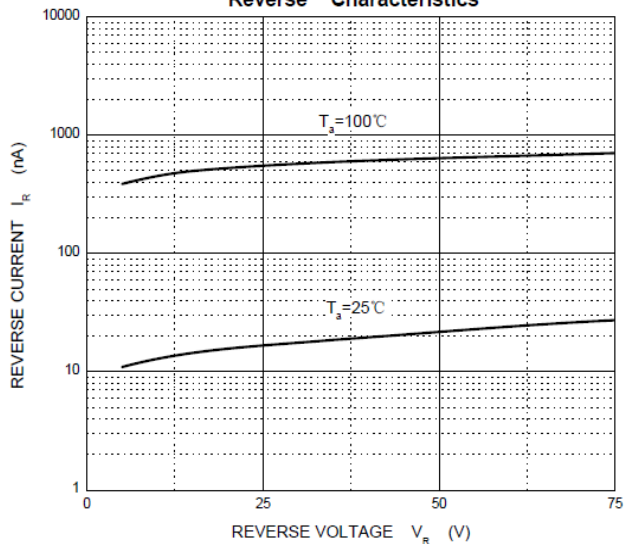
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V _{(BR)R}	75	-	-	V	I _R =100μA
Reverse Leakage Current	I _R	-	-	30	nA	V _R =25V
		-	-	1	μA	V _R =75V
Forward Voltage	V _F	-	-	0.715	V	I _F =1mA
		-	-	0.855		I _F =10mA
		-	-	1		I _F =50mA
		-	-	1.25		I _F =150mA
Total Capacitance	C _{tot}	-	1	-	pF	V _R =0, f=1MHz
Reverse Recovery Time	t _{rr}	-	4	-	nS	I _F =I _R =10mA, I _{rr} =0.1xI _R , R _L =100Ω

RATINGS AND CHARACTERISTIC CURVES

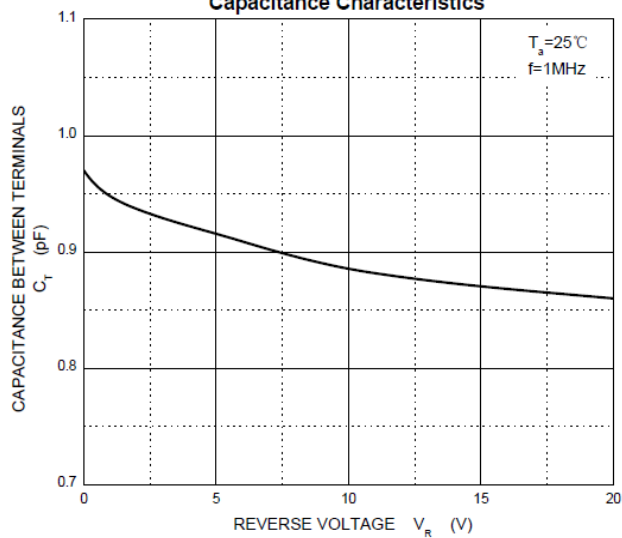
Forward Characteristics



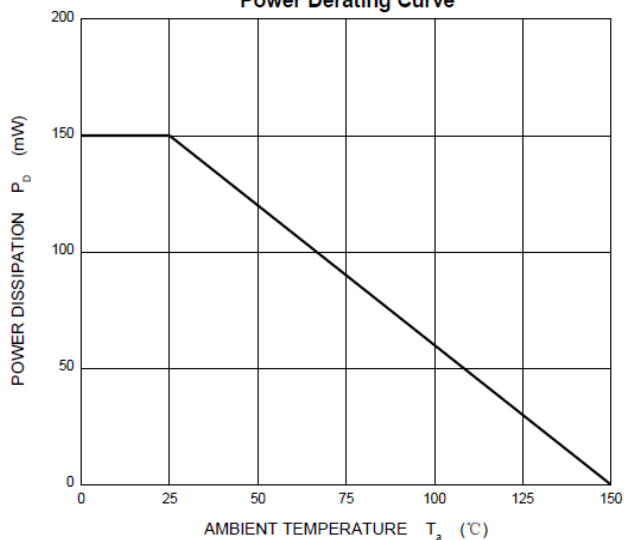
Reverse Characteristics



Capacitance Characteristics

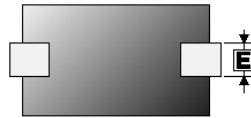
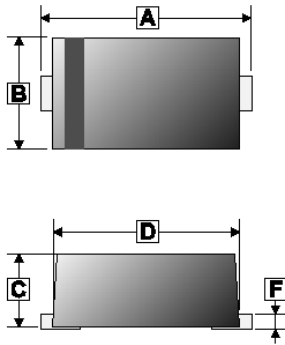


Power Derating Curve



PACKAGE OUTLINE DIMENSIONS

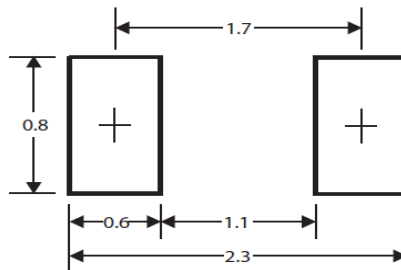
SOD-523



REF.	Millimeter	
	Min.	Max.
A	1.50	1.70
B	0.70	0.90
C	0.50	0.77
D	1.10	1.30
E	0.25	0.40
F	0.05	0.20

MOUNTING PAD LAYOUT

SOD-523



*Dimensions in millimeters