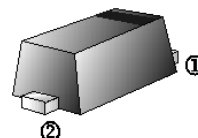


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Diode Capacitance
- Low Diode Forward Resistance

SOD-523

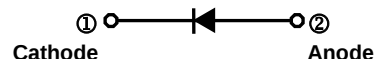


MARKING

A5

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	8K	7 inch



ORDER INFORMATION

Part Number	Type
BAP51W-02-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS (Single Diode @T_A=25°C)

Parameter	Symbol	Ratings	Unit
Continuous Reverse Voltage	V _R	60	V
Continuous Forward Current	I _F	50	mA
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	833	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{STG}	-55 ~ +150	°C

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

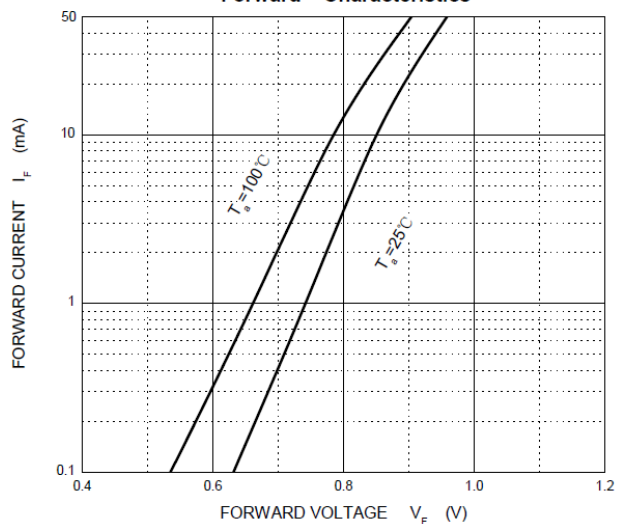
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Continuous Reverse Voltage	V _R	50	-	-	V	I _R =10A
Forward Voltage	V _F	-	-	1.1	V	I _F =50mA
Reverse Current	I _R	-	-	100	nA	V _R =50V
Diode Capacitance	C _{D1}	-	0.4	-	pF	V _R =0, f=1MHz
	C _{D2}	-	-	0.55		V _R =1V, f=1MHz
	C _{D3}	-	-	0.35		V _R =5V, f=1MHz
Diode Forward Resistance ¹	r _D	-	-	9	Ω	I _F =0.5mA, f=100MHz
		-	-	6.5		I _F =1mA, f=100MHz
		-	-	2.5		I _F =10mA, f=100MHz

Note:

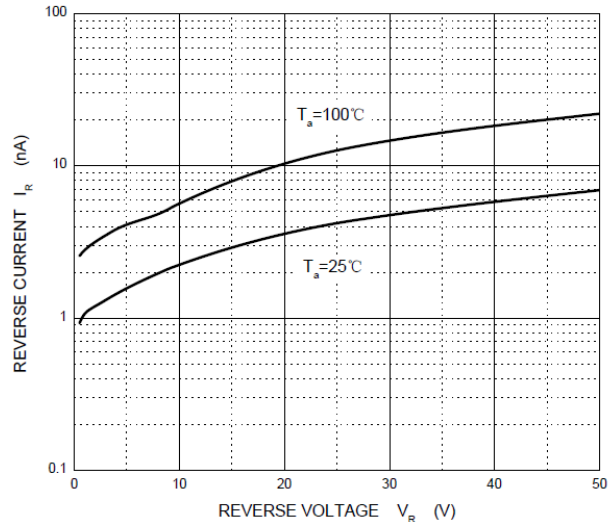
1. Guaranteed on AQL basis: inspection level S4,AQL 1.0.

TYPICAL CHARACTERISTICS

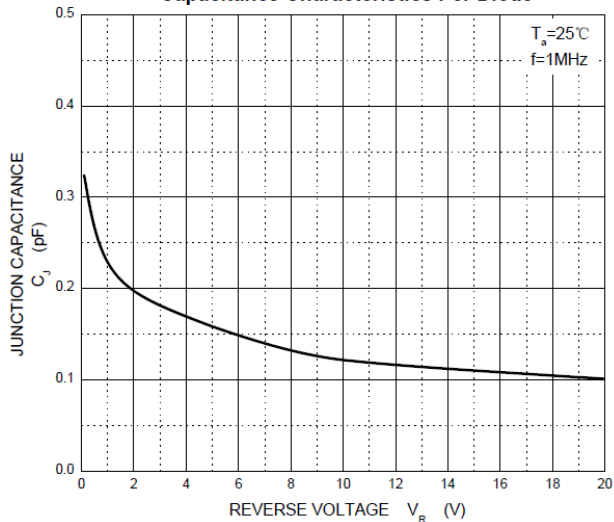
Forward Characteristics



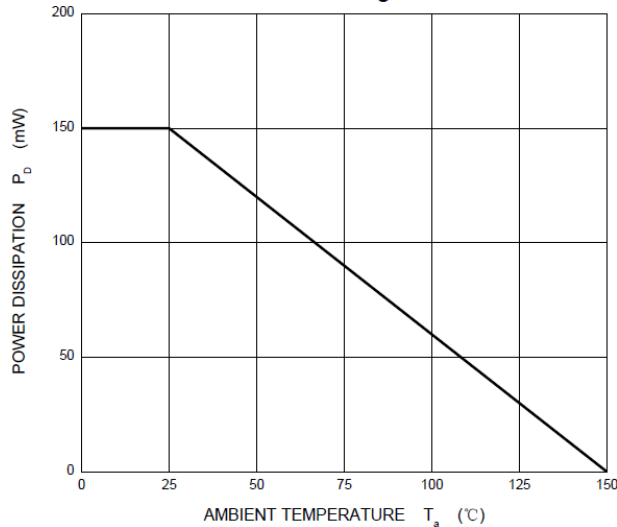
Reverse Characteristics



Capacitance Characteristics Per Diode

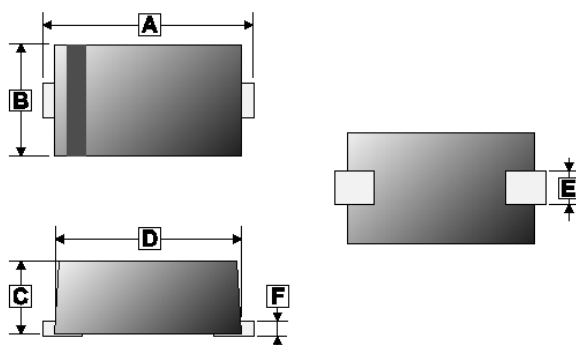


Power Derating Curve



PACKAGE OUTLINE DIMENSIONS

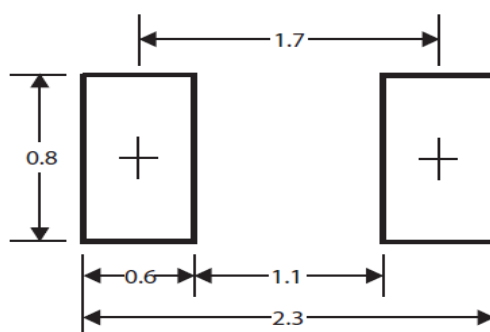
SOD-523



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