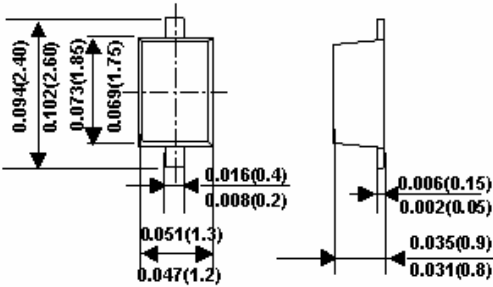


	B0520WS THRU B0530WS 0.5A Surface Mount Schottky Barrier Rectifier
	Voltage Range 20 to 30 Volts 235m Watts Power Dissipation
Features ✧ Low forward voltage drop ✧ Guard ring construction for transient protection ✧ High conductance ✧ Available in lead free version Mechanical Data ✧ Case: SOD-323F, plastic ✧ Case material – UL Flammability Rating Classification 94V-0 ✧ Moisture sensitivity: Level 1 per J-STD-020A ✧ Polarity: Cathode Band ✧ Terminals: Solderable per MIL-STD-202, Method 208 ✧ Marking: Cathode Band and Type Code ✧ Type Code: SD, SE ✧ Weight: 0.004 grams (approx.)	SOD-323F  Dimensions in inches and (millimeters)
Maximum Ratings and Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified.	

Maximum Ratings

Type Number	Symbol	B0520WS	B0530WS	Units
Peak Repetitive Reverse Voltage	VRRM			
Working Peak Reverse Voltage	VRWM	20	30	V
DC Blocking Voltage	VR			
RMS Reverse Voltage	VR(RMS)	14	21	V
Average Rectified Current @ TL=100 °C	Io	0.5		A
Non-repetitive Peak Forward Surge Current 8.3ms Single half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	2		A
Power Dissipation (Note 1)	Pd	235		mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	426		°C /W
Operating and Storage Temperature Range	TJ, TSTG	-40 to + 125		°C

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) IR=500uA	V(BR)R	30			V
Leakage Current (Note 2) VR=15V VR=20V VR=30V	IR			80 100 500	uA
Forward Voltage Drop (Note 2) IF=0.1A IF=0.5A	VF		0.40	0.36 0.45	V
Junction Capacitance VR=0, f=1MHz	Cj		58		pF

Notes: 1. Valid Provided that Leads are Kept at Ambient Temperature.

2. Short duration test pulse used to minimize self-heating effect..

RATINGS AND CHARACTERISTIC CURVES (B0520WS THRU B0530WS)

FIG.1- FORWARD CURRENT DERATING CURVE

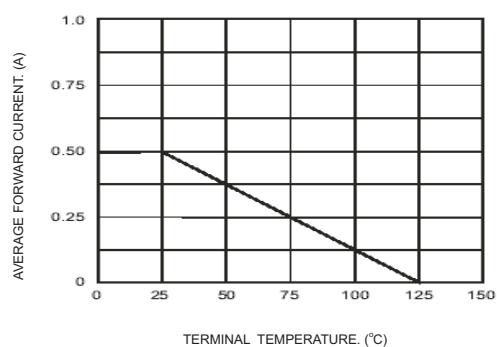


FIG.2- TYPICAL FORWARD CHARACTERISTICS

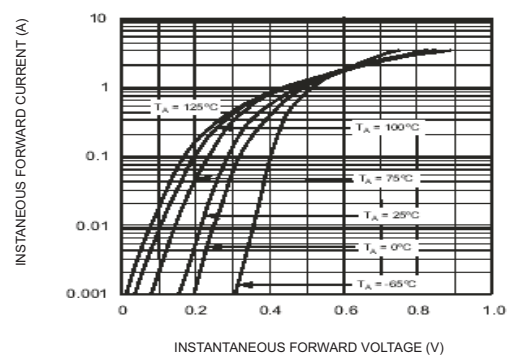


FIG.3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

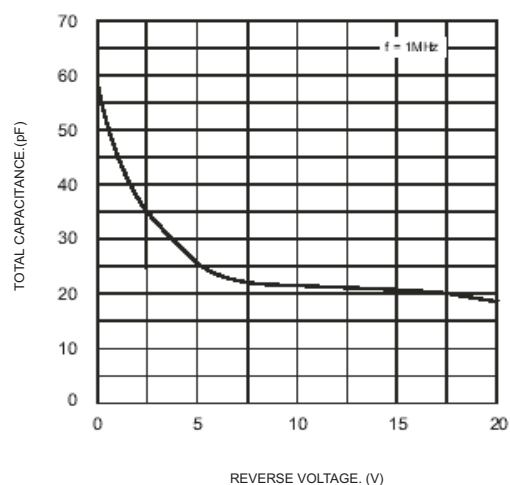


FIG.4- TYPICAL REVERSE CHARACTERISTICS

