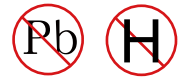




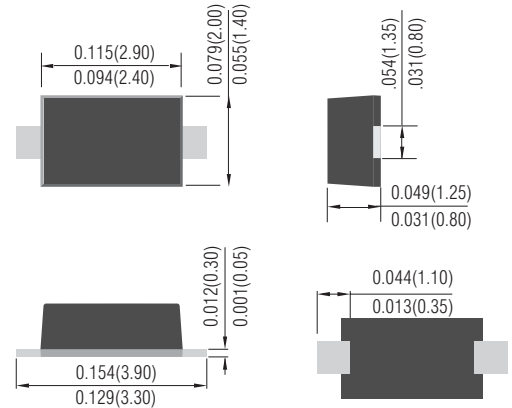
Surface Mount Schottky Barrier Diode
Voltage 20 - 250 Volts Current - 3 Amperes



Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High temperature soldering guaranteed: 260 °C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- AEC-Q101 qualified

SOD-123S Unit: inch(mm)



Mechanical Data

- Case: SOD-123S, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.
 Single Phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	S32S	S33S	S34S	S35S	S36S	S38S	S310S	S315S	S320S	S325S	UNITS
	Code	D32	D33	D34	D35	D36	D38	D310	D315	D320	D325	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}											V
	V _{RWM}	20	30	40	50	60	80	100	150	200	250	
	V _{DC}											
RMS Reverse Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	175	V
Average Rectified Output Current @T _L =90 °C	I _{F(AV)}	3.0										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80										A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	26.560										A ² s
Forward Voltage per element @I _F =3.0A	V _{FM}	0.55		0.7		0.85		0.92		0.95		V
Peak Reverse Current @T _A =25 °C At Rated DC Blocking Voltage @T _A =100 °C	I _R	0.1					0.05					mA
		10					5					
Typical Junction Capacitance (Note 1)	C _J	110					70					pF
Typical thermal resistance (Note 2)	R _{θJA}	75										°C/W
Operating and Storage Temperature Range	T _J ,T _{STG}	-55to+150										°C

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

DEVICE CHARACTERISTICS

S32S-A THRU S325S-A

FIG. 1- FORWARD CURRENT DERATING CURVE

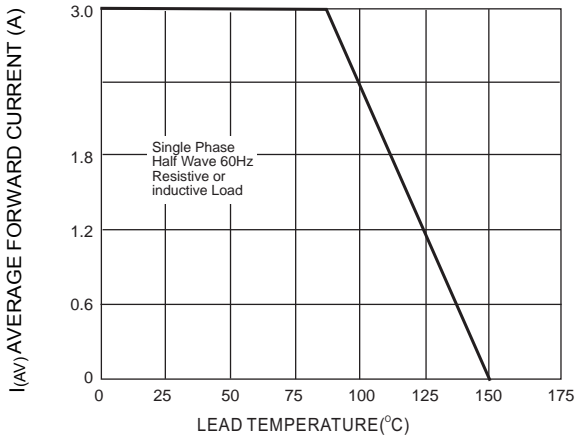


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

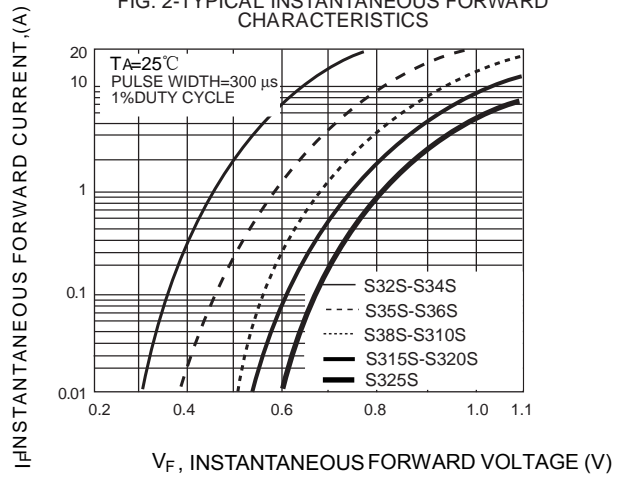


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

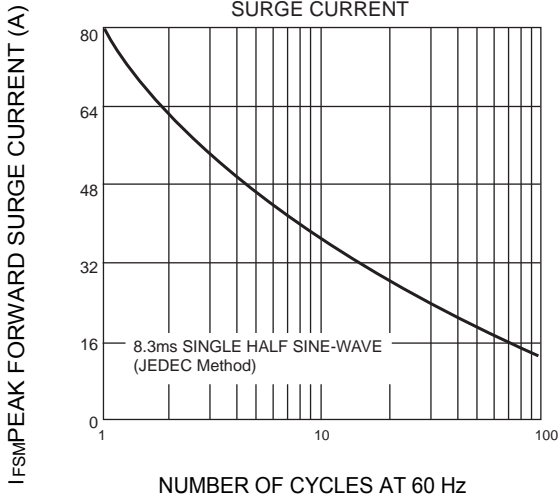


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

