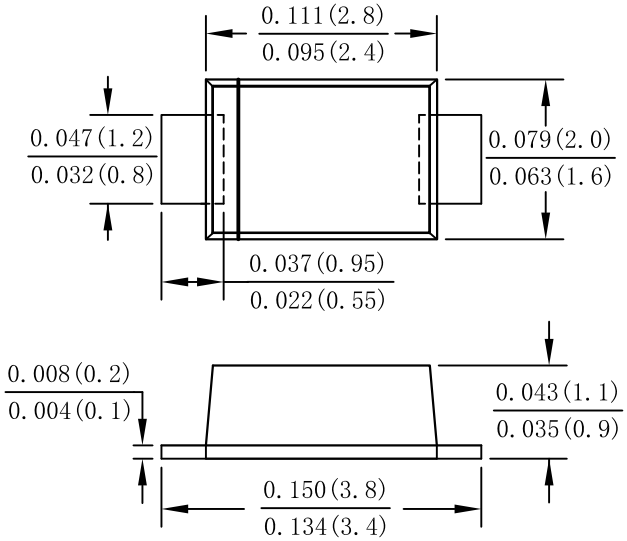
DSS32 THRU DSS320

Single Phase 3.0AMP Surface Mount Schottky Barrier Rectifier

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℃/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

Case: SOD-123FL



Dimensions in inches and (millimeters)

Mechanical Data

- Case: SOD-123FL, 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℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	DSS32	DSS33	DSS34	DSS35	DSS36	DSS38	DSS310	DSS315	DSS320	UNITS
	Code	D32	D33	D34	D35	D36	D38	D310	D315	D320	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	20	30	40	50	60	80	100	150	200	V
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current @T_L=90℃	$I_{F(AV)}$	3.0									A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 8.3ms Single half sine-wave @$T_{j=125}$ ℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	80 64									A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 1.0ms Single half sine-wave @$T_{j=125}$ ℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	160 128									A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	60									A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	26.560									A^2s
Forward Voltage per element @IF=3.0A	V_{FM}	0.55			0.7		0.85		0.92		V
	T_{yp}	0.52			0.65		0.80		0.85		
Peak Reverse Current @T_A =25℃ At Rated DC Blocking Voltage @T_A =100 ℃	I_R	0.1					0.05				mA
		10					5				
Typical Junction Capacitance (Note 1)	C_J	110					70				pF
Typical Thermal Resistance	$R_{\theta JA}$	115									℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150									℃

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

Fig. 1 Typical Forward Current Derating Curve

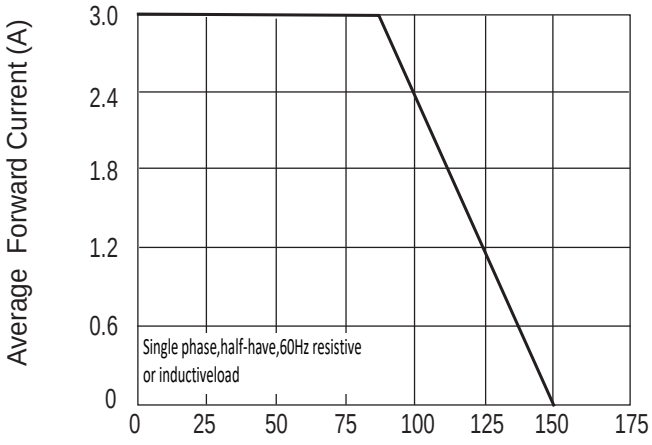


Fig. 2 Typical Instantaneous Forward Characteristics

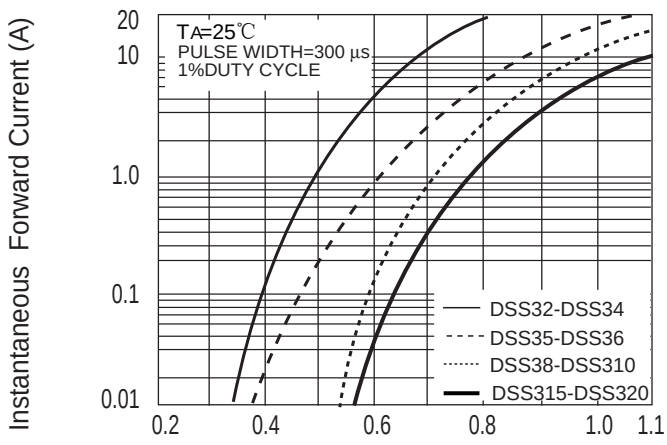


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

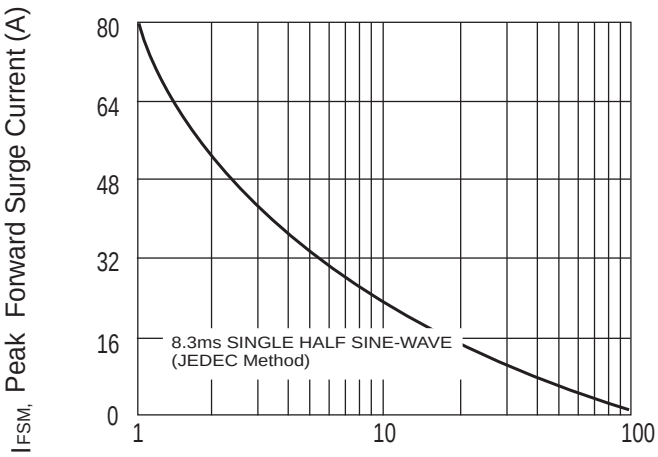


Fig.4 Typical Reverse Chracteristics

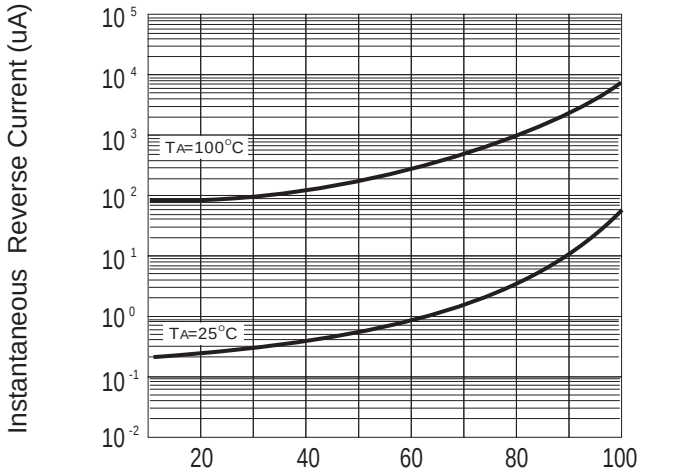
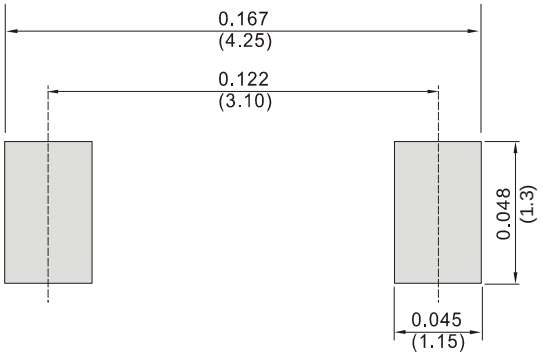


Fig.5 Typical Capacitance



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