

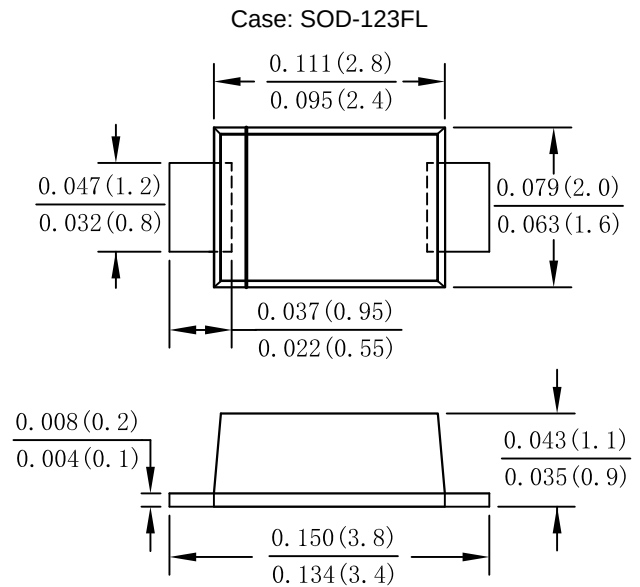
Single Phase 3.0AMP Surface Mount Schottky Barrier Rectifier

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

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°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	DSK32	DSK33	DSK34	DSK35	DSK36	DSK38	DSK310	DSK315	DSK320	UNITS	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
	V _{RWM}											
	V _{DC}											
RMS Reverse Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V	
Average Rectified Output Current @T _L =90 °C	I _{F(AV)}	3.0									A	
Non-Repetitive Peak Forward Surge @T _j =25 °C Current 8.3ms Single half sine-wave@T _j =125 °C Superimposed On Rated Load (JEDEC Method)	I _{FSM}	80 64									A	
Non-Repetitive Peak Forward Surge @T _j =25 °C Current 1.0ms Single half sine-wave @T _j =125°C 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	
ƒt Rating for Fusing (t < 8.3ms)	I ² t	26.560									A ² s	
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 °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	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

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Fig. 1 Typical Forward Current Derating Curve

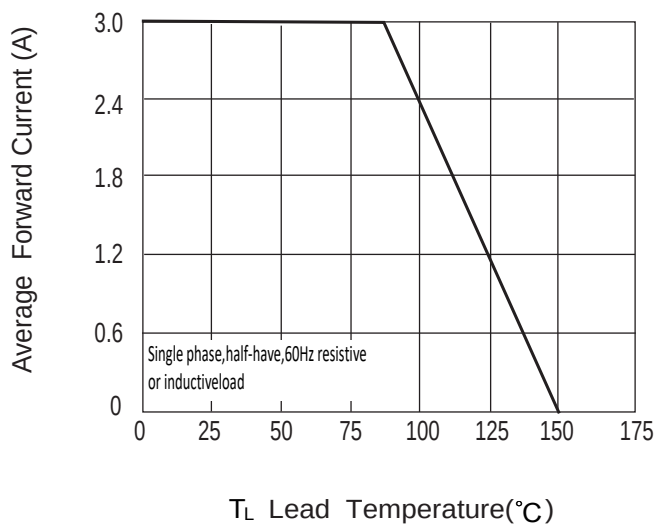


Fig. 2 Typical Instantaneous Forward Characteristics

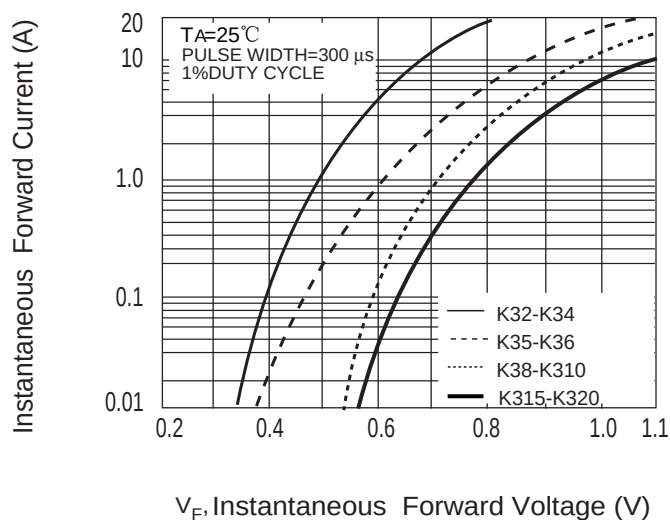


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

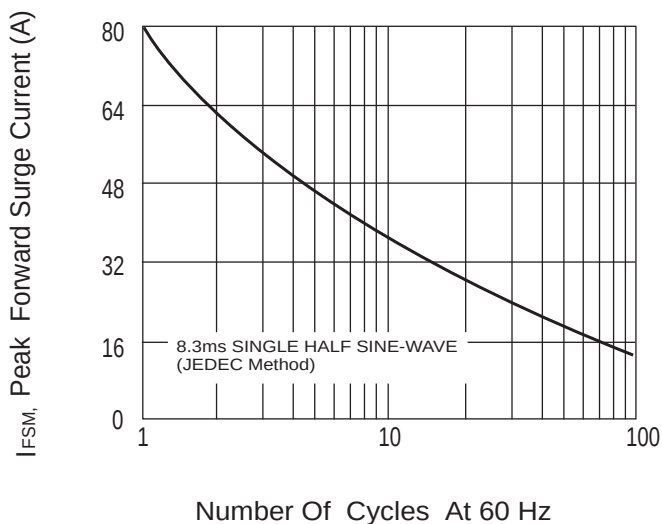


Fig.4 Typical Reverse Characteristics

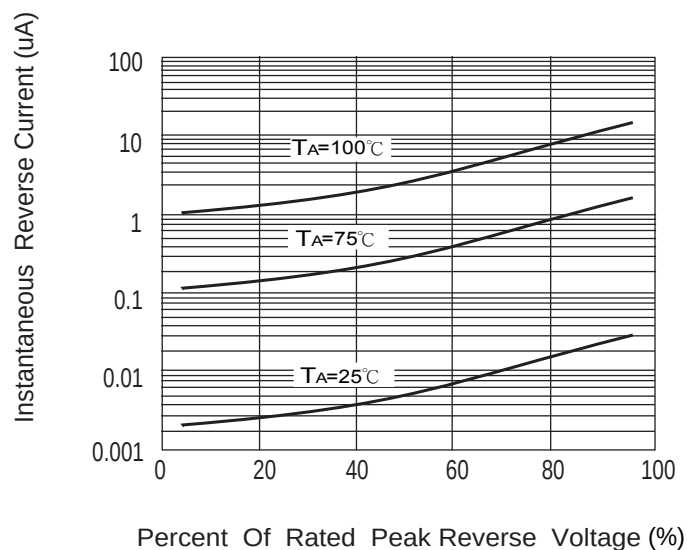


Fig.5 Typical Capacitance

