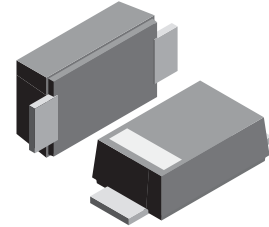


**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 3.0 A**

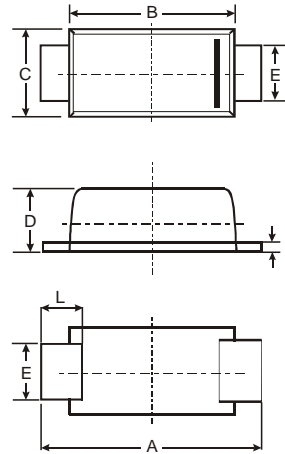


### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:  
 250°C/10 seconds, 0.375(9.5mm) lead length,  
 5 lbs. (2.3kg) tension

### Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body over passivated junction
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

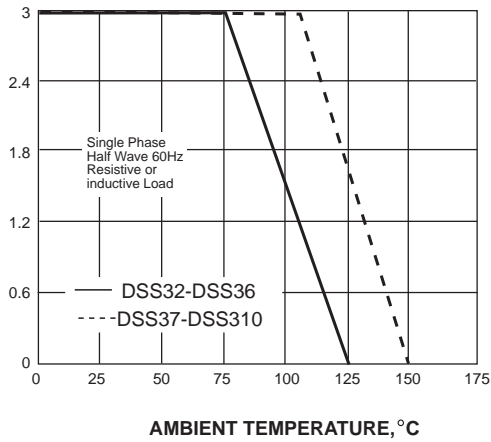
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	DSS32	DSS33	DSS34	DSS35	DSS36	DSS37	DSS38	DSS39	DSS310	Unit
	Marking	D32	D33	D34	D35	D36	D37	D38	D39	D310	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	Volts
Maximum average forward rectified current	I <sub>(AV)</sub>	3.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80.0									Amps
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	0.52	0.55	0.70			0.85			Volts	
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	0.5									mA
		20.0						10.0			
Operating junction temperature range	T <sub>J</sub>	-50 to +125						-50 to +150			°C
Storage temperature range	T <sub>STG</sub>	-50 to +150									°C

## RATINGS AND CHARACTERISTIC CURVES DSS32 THRU DSS310

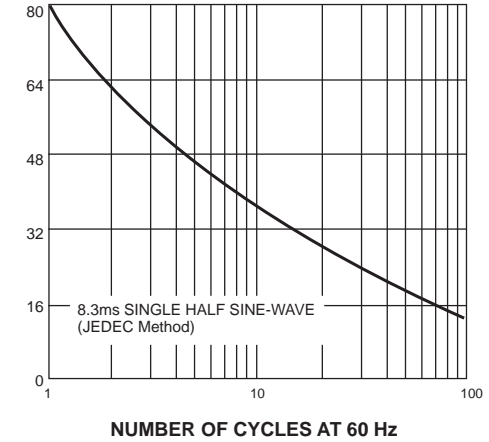
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



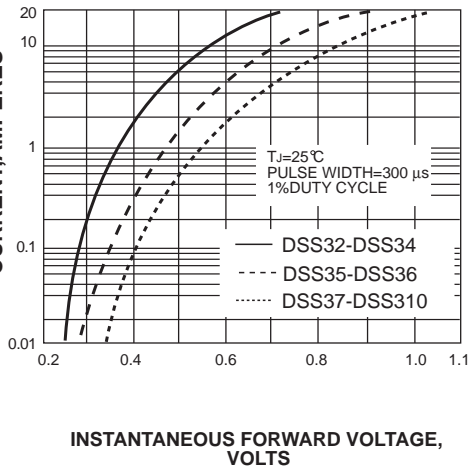
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

