

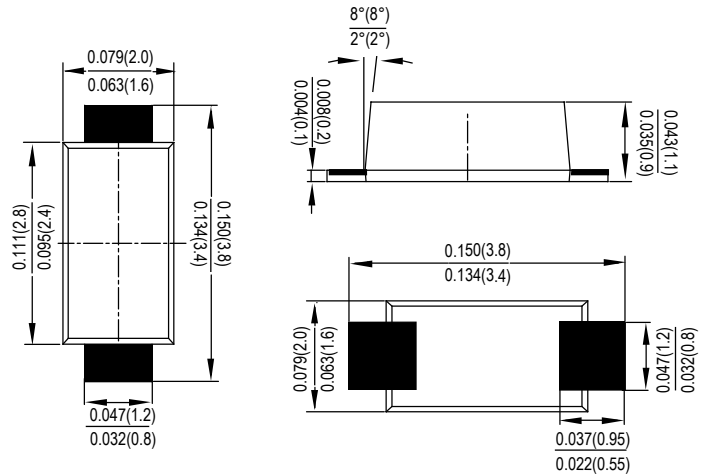
DSS22 THRU DSS225

SINGLE PHASE 2.0AMP 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

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°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	DSS22	DSS23	DSS24	DSS25	DSS26	DSS28	DSS210	DSS215	DSS220	DSS225	UNITS	
	Code	D22	D23	D24	D25	D26	D28	D210	D215	D220	D225		
Peak Repetitive Reverse Voltage	V_{RRM}											V	
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	100	150	200	250		
DC Blocking Voltage	V_{DC}												
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	175	V	
Average Rectified Output Current @ $T_L = 90^\circ C$	$I_{F(AV)}$	2.0										A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50										A	
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	10.375										A^2s	
Forward Voltage per element @ $I_F=2.0A$	V_{FM}	0.55			0.7		0.85		0.92		0.95	V	
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	I_R	0.1					0.05						mA
		10					5						
Typical junction capacitance (NOTE 1)	C_J	220					80						pF
Operating junction temperature range	T_J	-55to+150										°C	
Operating and Storage Temperature Range	T_{STG}	-55to+150										°C	

Note:1. Measured at 1MHZ and applied reverse voltage of 4.0V D.C.

FIG. 1- FORWARD CURRENT DERATING CURVE

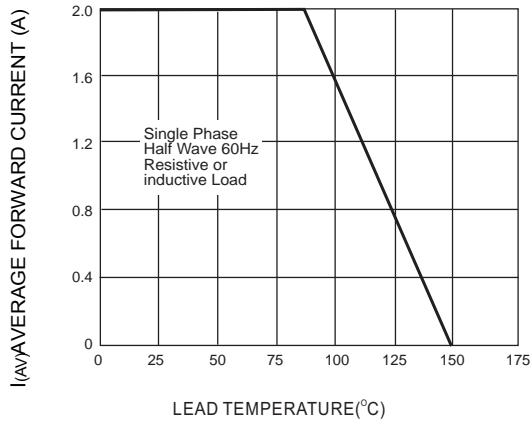


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

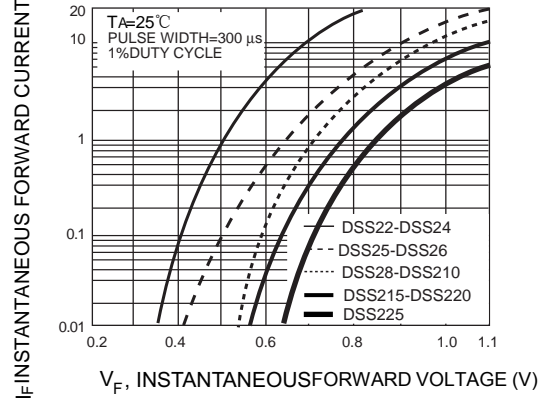


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

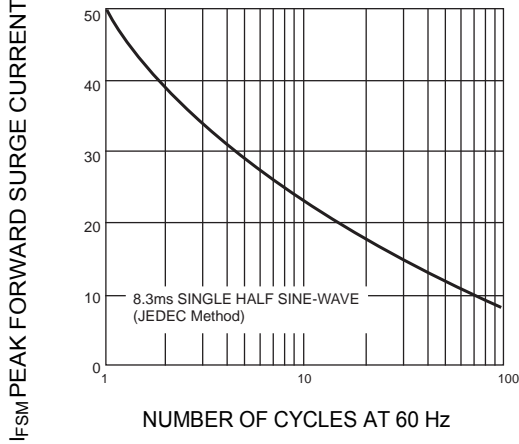


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

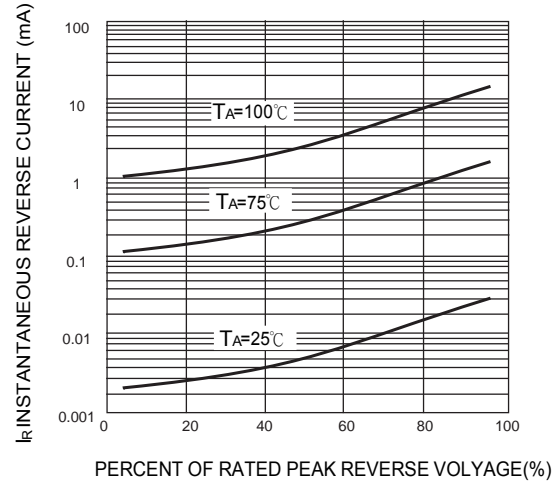


FIG. 5-TYPICAL JUNCTION CAPACITANCE

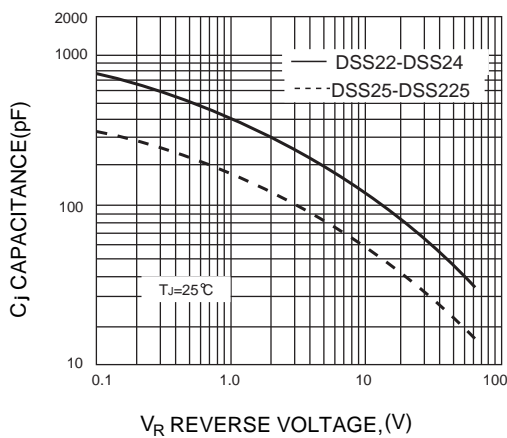
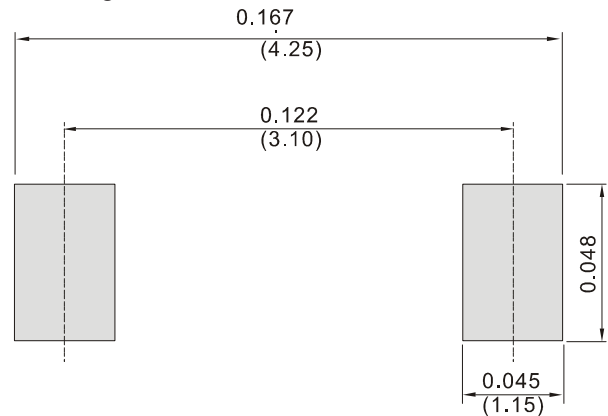


Fig.6 TYPICAL CAPACITANCE



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