

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

# DSS22 THRU DSS210

**VOLTAGE RANGE**
**20 to 100 Volts**
**CURRENT**
**2.0 Ampere**

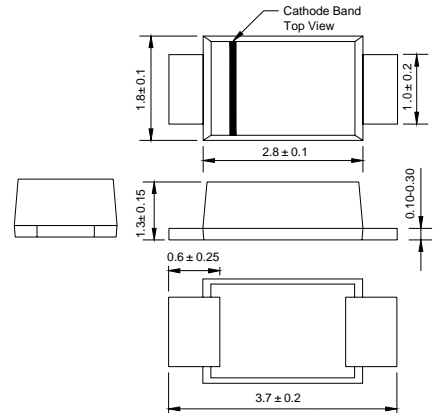
### FEATURES

- 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
- Terminals : 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



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25 C ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	DSS22 D22	DSS23 D23	DSS24 D24	DSS25 D25	DSS26 D26	DSS27 D27	DSS28 D28	DSS29 D29	DSS210 D210	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	49	56	63	70	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum average forward rectified current	$I_{(AV)}$	2.0									Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40.0									Amps	
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.55			0.70		0.85				Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5					10.0					mA
Typical junction capacitance (NOTE 1)	$C_J$	220				80						pF
Operating junction temperature range	$T_J$	-65 to +125					-65 to +150					°C
Storage temperature range	$T_{STG}$	-65 to +150										°C

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



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VOLTAGE RANGE

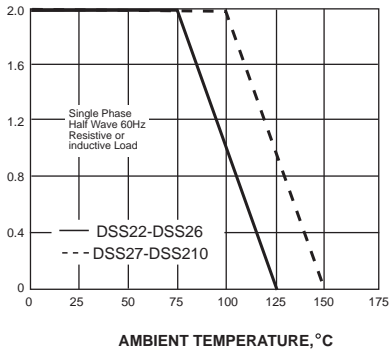
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CURRENT

2.0 Ampere

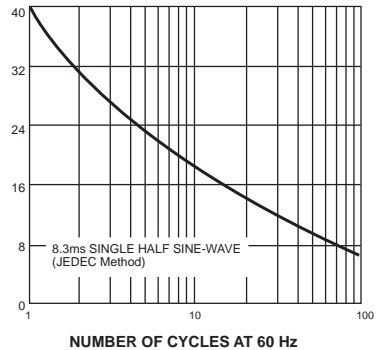
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



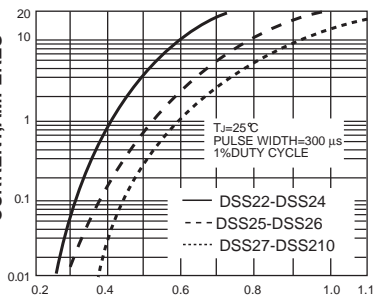
PEAK FORWARD SURGE CURRENT, AMPERES

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



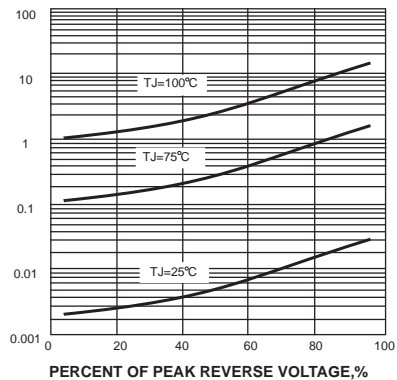
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

