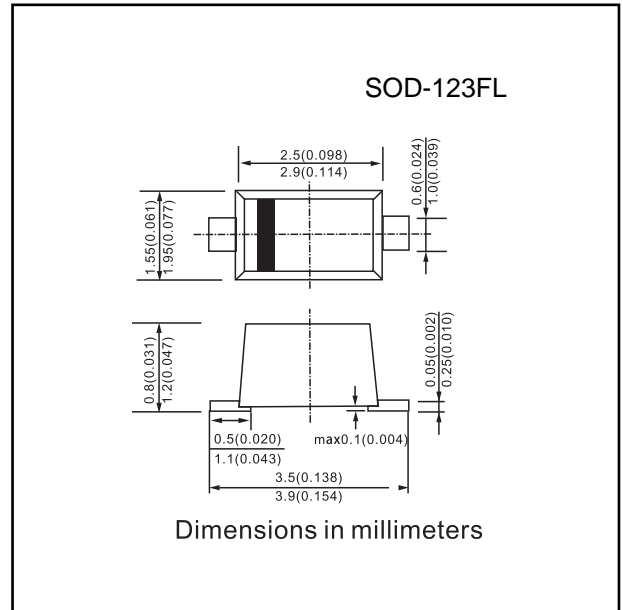


## FEATURES

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

## MECHANICAL DATA

- **Case:** JEDEC SOD-123FL molded plastic body over passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end
- **Weight:** 0.017gram



## 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%.

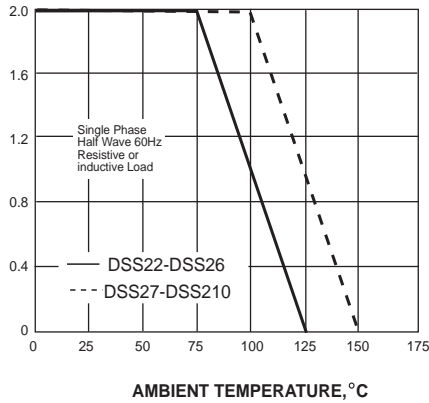
Characteristic	SYMBOLS	DSS22	DSS23	DSS24	DSS25	DSS26	DSS27	DSS28	DSS29	DSS210	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	49	56	63	70	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	70	80	90	100	VOLTS	
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 $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.5					5.0				mA	
Typical junction capacitance (NOTE 1)	$C_J$	220				80					pF	
Operating junction temperature range	$T_J$	-50 to +125					-50 to +150					°C
Storage temperature range	$T_{STG}$	-50 to +150										°C

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

## RATINGS AND CHARACTERISTIC CURVES DSS22 THRU DSS210

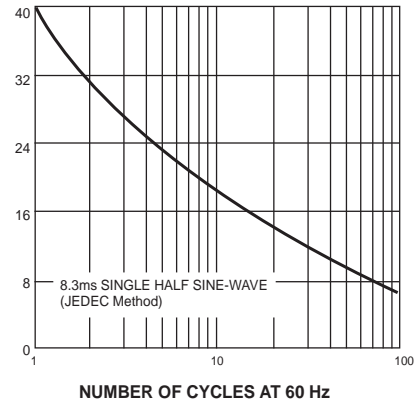
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



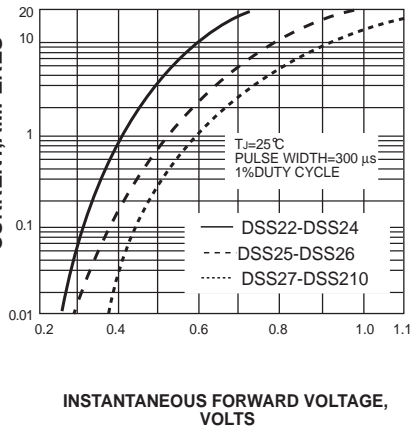
PEAK FORWARD SURGE CURRENT,  
AMPERES

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



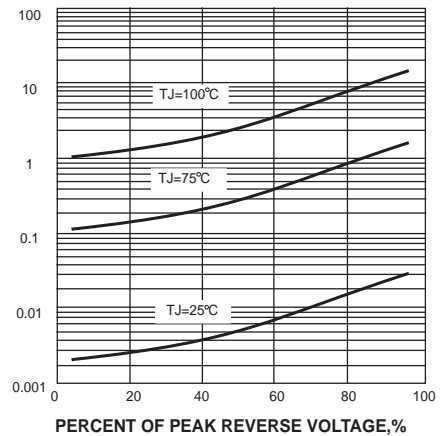
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

