

II. Schottky Rectifier

2.0A Surface Mount Schottky Rectifier DSS22~DSS210

(Package: SOD-123FL)

<p><u>FEATURES</u></p> <ul style="list-style-type: none"> • 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 <p><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> • Case : JEDEC SOD-123FL molded plastic body • Terminals : Solder plated, solderable per MIL-STD-750, method 2026 • Polarity : Color band denotes cathode end • Mounting Position : Any • Weight : 0.020 grams 	<p style="text-align: center;">Cathode Band Top View</p> <p style="text-align: center;">Case: SOD-123FL Dimensions in inches and (millimetres)</p>
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Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Characteristics	Symbol	DSS 22	DSS 23	DSS 24	DSS 25	DSS 26	DSS 27	DSS 28	DSS 29	DSS 210	Units	
	Marking Code	D22	D23	D24	D25	D26	D27	D28	D29	D210		
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_o	2.0									Amps	
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 2.0 A	V_F	0.55			0.70			0.85			Volts	
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	I_R	0.5									mA	
		10.0						5.0				
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	

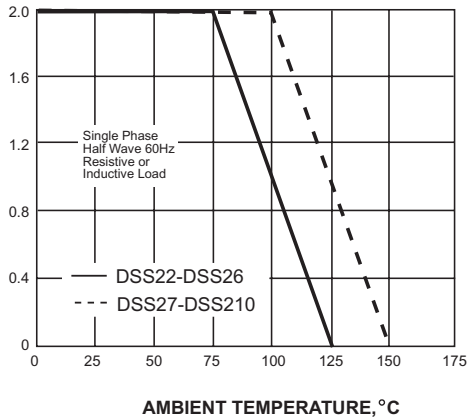
Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.

Ratings and Characteristic Curves of DSS22~DSS210

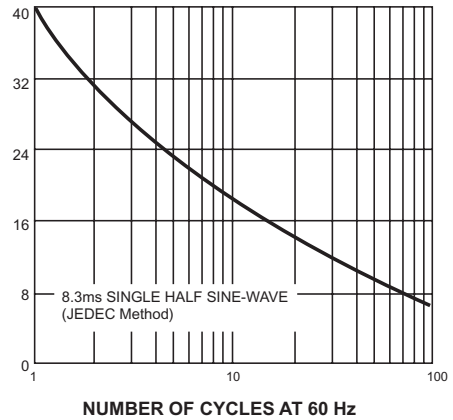
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



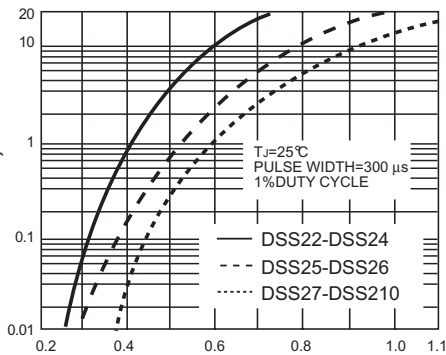
PEAK FORWARD SURGE CURRENT, AMPERES

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



INSTANTANEOUS FORWARD CURRENT, AMPERES

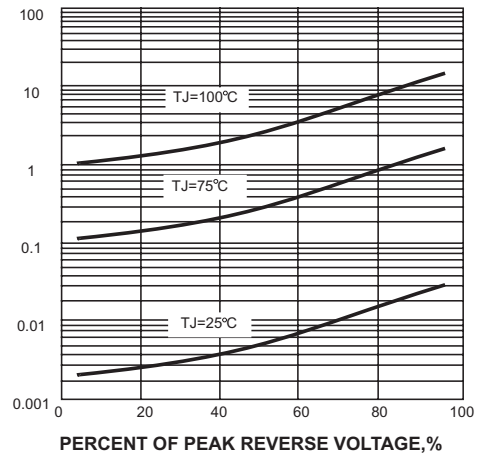
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

