

II. Schottky Rectifier

3.0A Surface Mount Schottky Rectifier DSS32~DSS310

(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;">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 32	DSS 33	DSS 34	DSS 35	DSS 36	DSS 37	DSS 38	DSS 39	DSS 310	Units
	Marking Code	D32	D33	D34	D35	D36	D37	D38	D39	D310	
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	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60.0									Amps
Maximum instantaneous forward voltage at 3.0 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
		20.0			10.0						
Typical junction capacitance (Note 1)	C_j	500			300						PF
Operating junction temperature range	T_j	-65 to +125					-65 to +150				°C
Storage temperature range	T_{stg}	-65 to +150									°C

Notes:

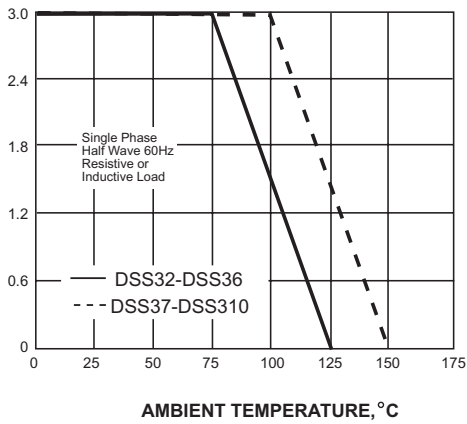
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.

<http://patron-components.com/>

Ratings and Characteristic Curves of DSS32~DSS310

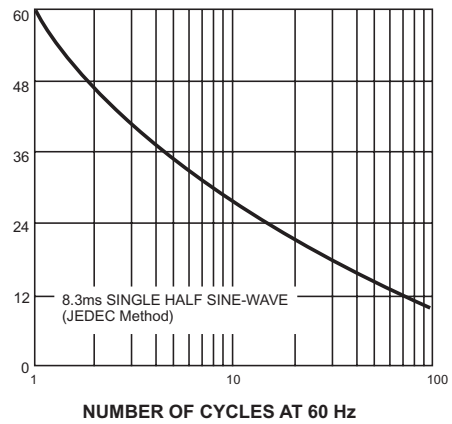
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



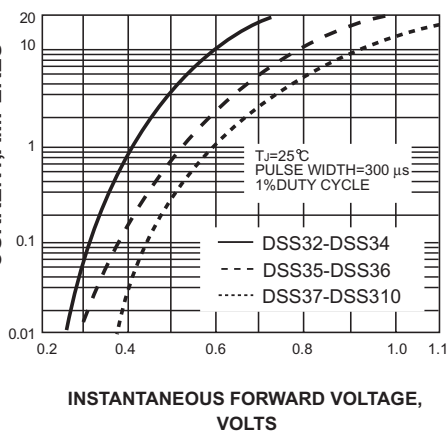
PEAK FORWARD SURGE CURRENT, AMPERES

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



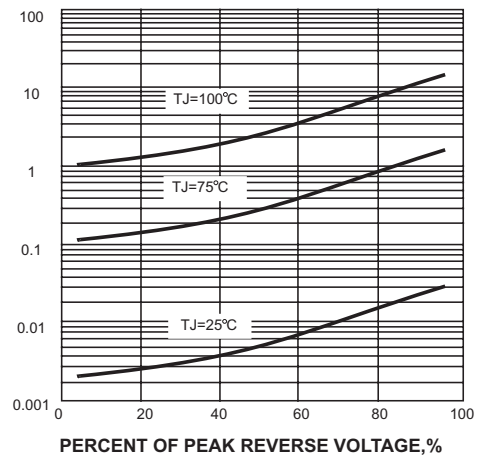
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

