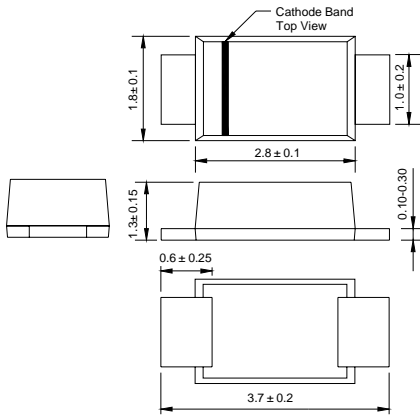


DSS32 THRU DSS310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Ampere

SOD-123FL



Dimensions in millimeters

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
- ◆ Green compound (halogen & Sb₂O₃ free)

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

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%.

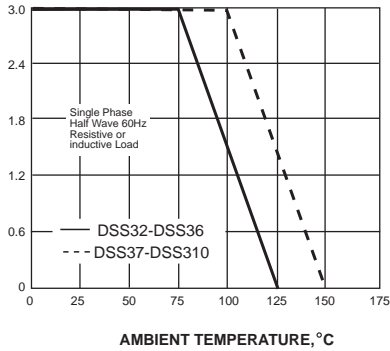
	SYMBOLS	DSS32 D32	DSS33 D33	DSS34 D34	DSS35 D35	DSS36 D36	DSS37 D37	DSS38 D38	DSS39 D39	DSS310 D310	UNITS	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	VOLTS	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum average forward rectified current	I _(AV)	3.0									Amp	
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 3.0A	V _F	0.55			0.70		0.85				Volts	
Maximum DC reverse current at rated DC blocking voltage	I _R	0.5									mA	
TA=25°C TA=100°C		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

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

RATINGS AND CHARACTERISTIC CURVES DSS32 THRU DSS310

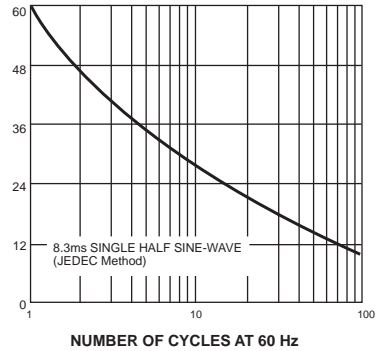
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



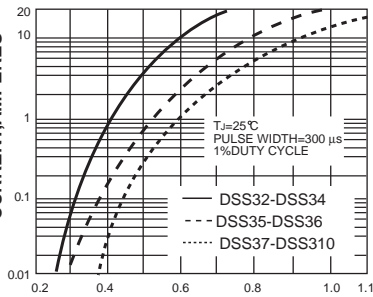
PEAK FORWARD SURGE CURRENT, AMPERES

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



INSTANTANEOUS FORWARD CURRENT, AMPERES

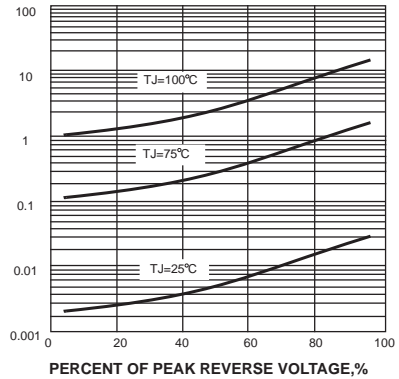
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

