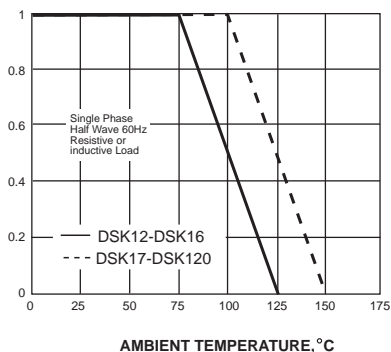


<u>SOD-123FL</u>		<u>FEATURES</u>												
<p style="text-align: center;">Dimensions in millimeters</p>		<ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ Metal silicon junction, majority carrier conduction ◆ Low power loss, 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 												
		<u>MECHANICAL DATA</u>												
		<p>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</p>												
<u>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</u>														
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%.														
Catalog Number	SYMBOLS	DSK12 K12	DSK13 K13	DSK14 K14	DSK15 K15	DSK16 K16	DSK17 K17	DSK18 K18	DSK19 K19	DSK110 K110	DSK115 K115	DSK120 K120	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	VOLTS	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	VOLTS	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	VOLTS	
Maximum average forward rectified current	$I_{(AV)}$	1.0											Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0											Amps	
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70			0.85				0.95	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					0.2 2.0		mA
Typical junction capacitance (NOTE 1)	C_J	110					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.														

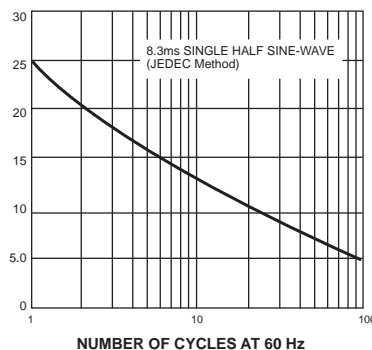
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



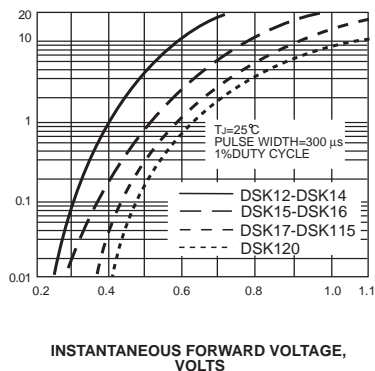
PEAK FORWARD SURGE CURRENT,
AMPERES

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



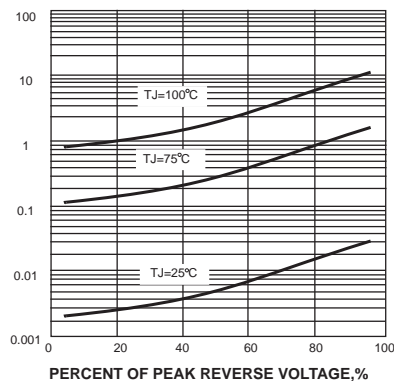
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

