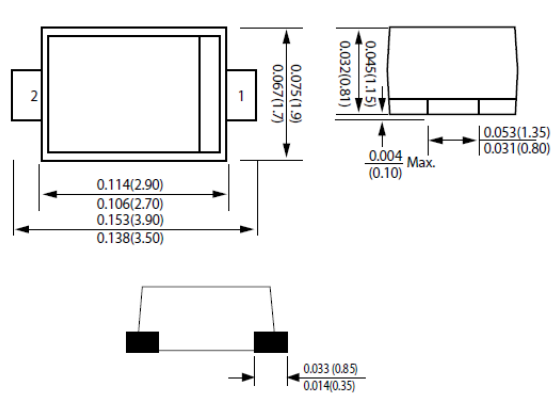


HIGH EFFICIENCY RECTIFIERS	REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1 Ampere
<p>FEATURES</p> <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Low reverse current • Fast reverse recovery time <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: SOD-123FL • Polarity: Cathode Band • Weight: 0.002 grams (approximate) 	<p>SOD-123FL</p>  <p>Dimensions in inches and (millimeters)</p>

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, derate current by 20%

Characteristics	Symbol	HFM 101FL	HFM 102FL	HFM 103FL	HFM 104FL	HFM 105FL	HFM 106FL	HFM 107FL	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V	
MARKING CODE		H1	H2	H3	H4	H5	H6	H7		
Maximum Instantaneous forward voltage $I_F=1A$ @25°C	V_F	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_C=25^\circ C$ $T_C=125^\circ C$	I_R				5 100					μA
Maximum average forward rectified current	$I_{F(AV)}$				1					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}				30					A
Typical Junction Capacitance (NOTE1)	C_J	550								pF
Maximum Reverse Recovery Time (NOTE2)	T_{rr}	50			75					nS
Typical Thermal Resistance (NOTE3)	$R_{\theta JA}$				80					°C/W
Junction and Storage Temperature Range	T_J, T_{STG}				-55 to +150					°C

NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2. Measured with $I_F=0.5A, I_R=1A, I_{RR}=0.25A$
3. Device mounted on FR-4 substrate, 1**1", 2oz, single-sided, PC boards with 0.1**0.15" copper pad.

Rating and Characteristic Curves

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

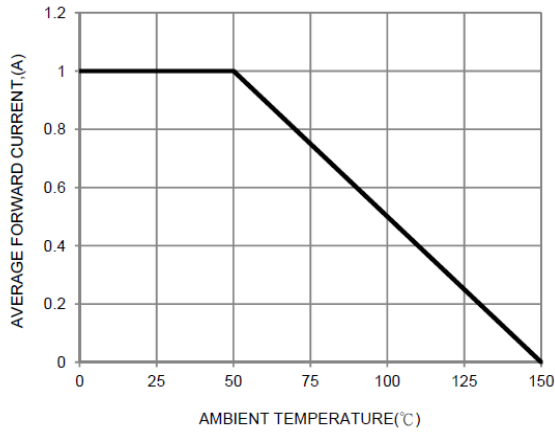


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

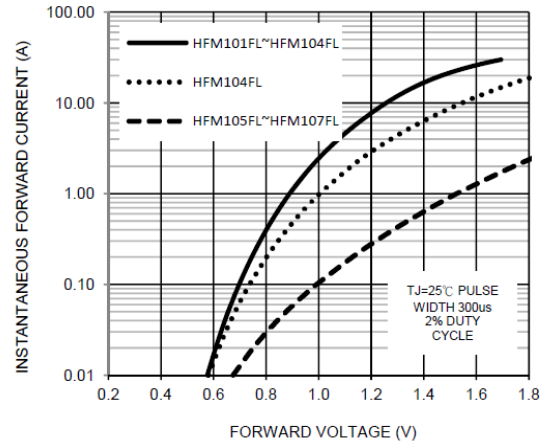


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

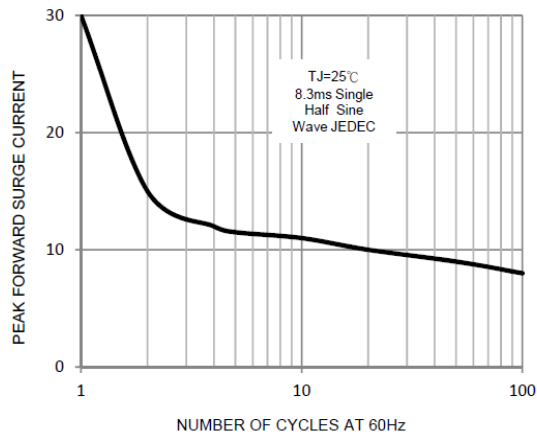


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

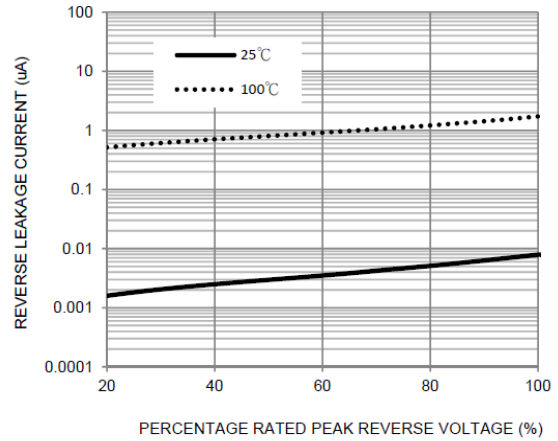


FIG. 5-TYPICAL JUNCTION CAPACITANCE

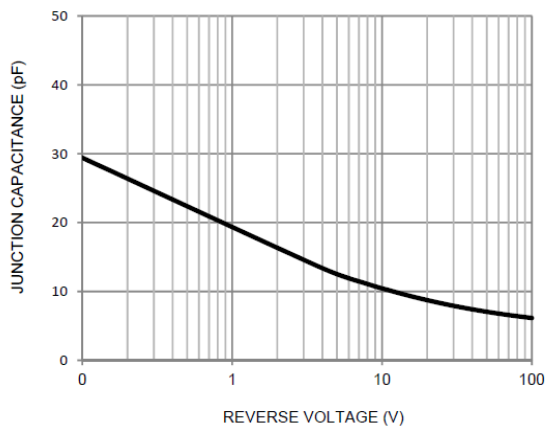


FIG. 6-Reverse Recovery Time Characteristic and Test Circuit

