



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

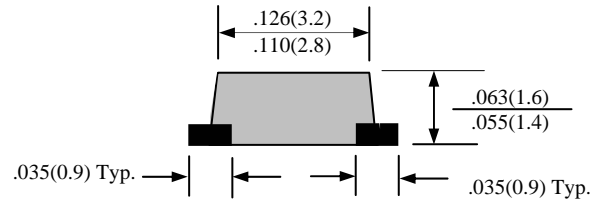
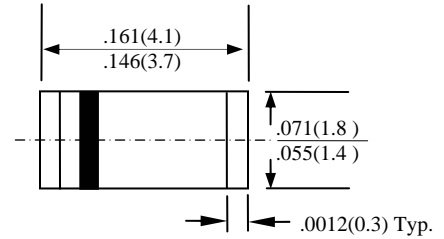
SURFACE MOUNT SILICON RECTIFIERS S07A-LFR THRU S07M-LFR

FEATURES

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0-UTILIZING FLAME RETARDANT EPOXY MOLDING COMPOUND
- FOR SURFACE MOUNTED APPLICATIONS.
- EXCEEDS ENVIRONMENTAL STANDARDS OF MIL-S-19500 / 228
- LOW LEAKAGE CURRENT
- ROHS

MECHANICAL DATA

- CASE: MOLDED PLASTIC, JEDEC SOD-123 / MINI SMA
- DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED, SOLDERABLE PER MIL-STD-750, METHOD 2026
- MOUNTING POSITION : ANY
- WEIGHT: 0.04 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

RATINGS	SYMBOL	S07A-LF R	S07B-LF R	S07D-LF R	S07G-LF R	S07J-LFR	S07K-LF R	S07M-LF R	UNITS
MARKING CODE		A or A1	B or A2	D or A3	G or A4	J or A5	K or A6	M or A7	
MAXIMUM RECURRENT 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	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_L=75^\circ\text{C}$	I_o	0.7							A
PEAK FORWARD SURGE CURRENT 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD (JEDEC METHOD)	I_{FSM}	25							A
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE AT I_o DC	V_F	1.1							V
MAXIMUM DC REVERSE CURRENT $T_A=25^\circ\text{C}$ AT RATED DC BLOCKING VOLTAGE $T_A=125^\circ\text{C}$	I_R	5.0 50.0							μA
TYPICAL REVERSE RECOVERY TIME (NOTE 1)	T_{tr}	1.8							μs
TYPICAL JUNCTION CAPACITANCE (NOTE 2)	C_J	4.0							PF
OPERATING JUNCTION AND STORAGE TEMPERATURE RANGE	T_J, T_{STG}	-55 TO + 150							$^\circ\text{C}$

- NOTES: 1. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V

RATINGS AND CHARACTERISTIC CURVES S07A-LFR THRU S07M-LFR

FIG. 1 - FORWARD CURRENT DERATING CURVE

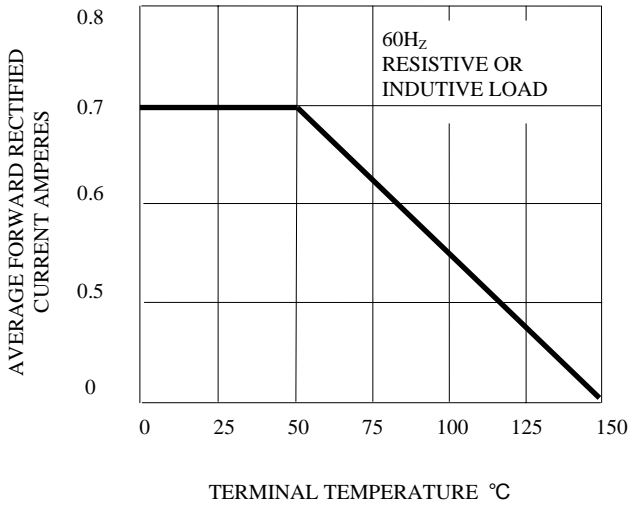


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

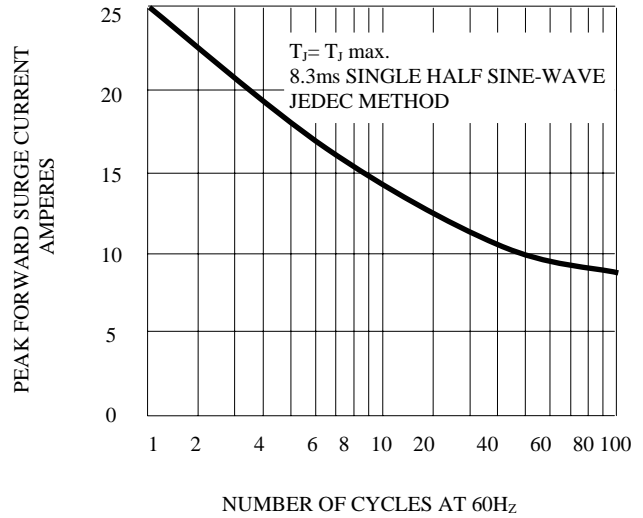


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

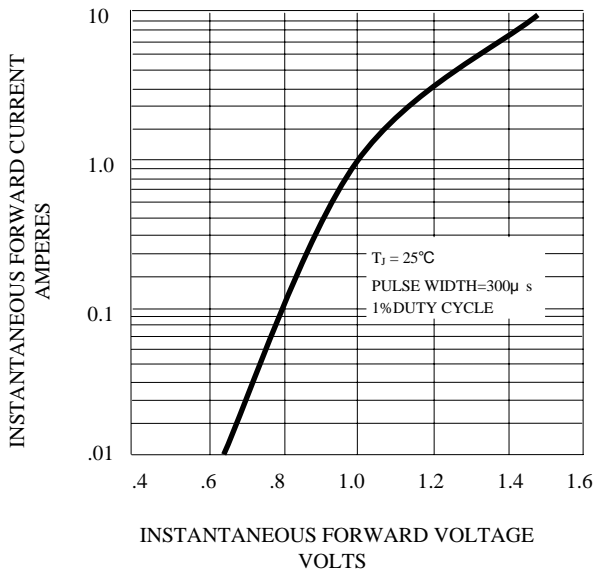


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

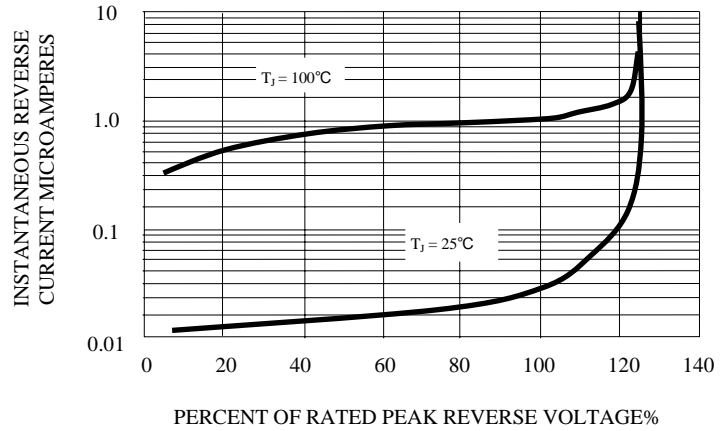


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

