Frontier Electronics Corp.

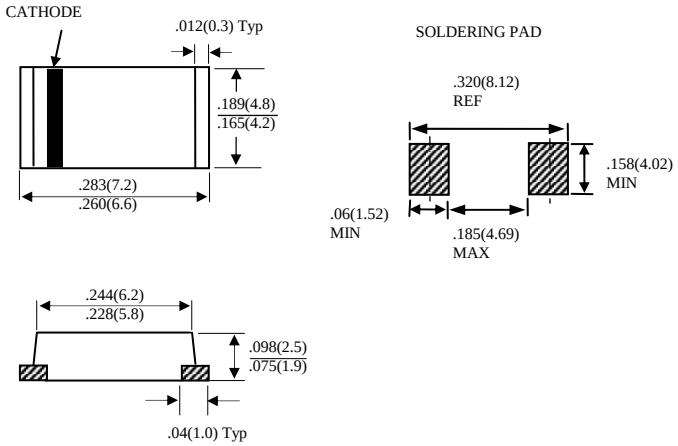
667 E. COCHRAN STREET, SIMI VALLEY, CA 93065
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5A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SK52-LFR THRU SK510-LFR

FEATURES

- FOR SURFACE MOUNTED APPLICATIONS
- LOW PROFILE PACKAGE
- BUILT-IN STRAIN RELIEF
- EASY PICK AND PLACE
- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY CLASSIFICATION 94 V-0
- EXTREMELY LOW VF
- MAJORITY CARRIER CONDUCTION
- HIGH TEMPERATURE SOLDERING: 250°C /10 SECONDS AT TERMINALS
- ROHS



MECHANICAL DATA

- CASE: THIN SMC, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED
- POLARITY: INDICATED BY CATHODE BAND
- WEIGHT: 0.195 GRAMS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SK52-LFR	SK53-LFR	SK54-LFR	SK55-LFR	SK56-LFR	SK58-LFR	SK510-LFR	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	50	60	80	100	V
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	35	42	56	70	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	50	60	80	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1	I_O	5.0							A
MAXIMUM OVERLOAD SURGE 8.3ms SINGLE HALF SINE-WAVE	I_{FSM}	150							A
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							℃
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 125							℃

ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SK52-LFR	SK53-LFR	SK54-LFR	SK55-LFR	SK56-LFR	SK58-LFR	SK510-LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT 5.0A AC AND 25℃	V_F	0.55			0.70		0.85		V
MAXIMUM REVERSE CURRENT AT 25℃	I_R	0.5							mA

RATINGS AND CHARACTERISTIC CURVE SK52-LFR THRU SK510-LFR

FIG. 1 - FORWARD CURRENT DERATING CURVE

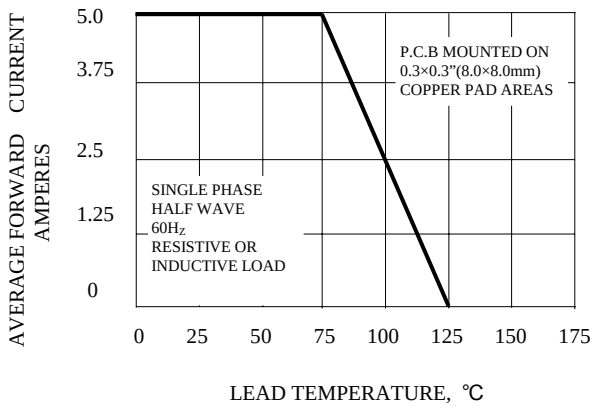


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

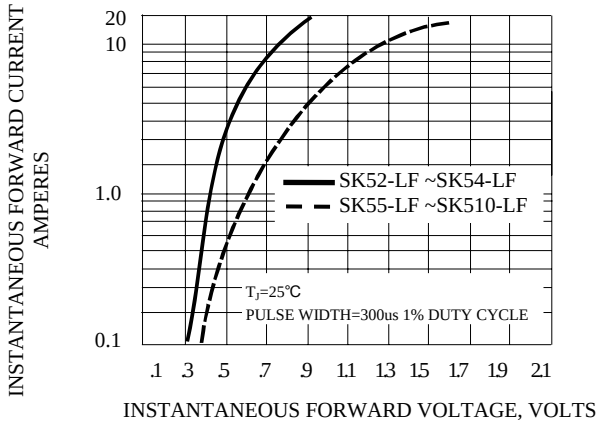


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

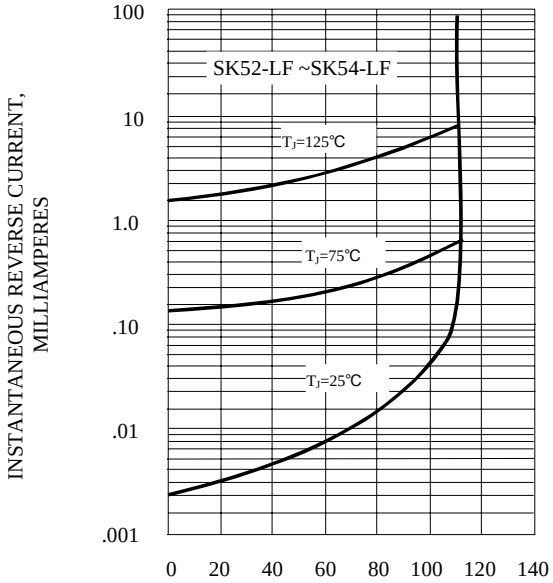


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

