

3.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V- 40V SMA-L PACKAGE

FM5820AL THRU FM5822AL Pb Free Product

FEATURES

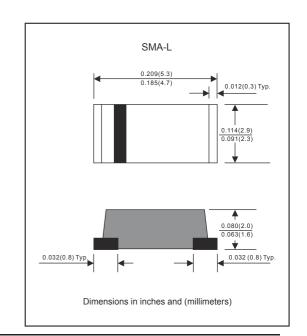
- * Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- * Low profile surface mounted application in order to optimize board space.
- * High current capability, low forward voltage drop.
- * Ultra high-speed switching.
- * Lead-free parts meet environmental standars of MIL-STD-19500/228
- * RoHS product for packing code suffix "G"
 Halogen free product for packing code suffix "H"

MECHANICAL DATA

Case: Molded plastic, DO-214AC / SMA-L Epoxy: UL 94V-O rate flame retardant Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.

Mounting position: Any

Weight: Approximated 0.05 gram.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive of inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	FM5820AL	FM5821AL	FM5822AL	UNIT
Marking Code		SK32	SK33	SK34	
Maximum Recurrent Peak Reverse Voltage	Vrrm	20	30	40	Volts
Maximum RMS Voltage	VRMS	14	21	28	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	Volts
Maximum Average Forward Rectified Current	lo	3.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80			Amps
Typical Thermal Resistance (Note 2)	Roja	80			°C/W
Typical Junction Capacitance (Note 1)	CJ	250			
Operating Temperature Range	TJ	-55 to +125			
Storage Temperature Range	TsTg	-55 to +150			

CHARACTERISTICS		SYMBOL	FM5820AL	FM5821AL	FM5822AL	UNIT
Maximum Forward Voltage at 3.0A DC		VF	0.475	0.500	0.525	Volts
Maximum Average Reverse Current at	@TJ=25°C	In	0.5			mAmps
Rated DC Blocking Voltage	@TJ=100°C	IR	20			

NOTES:

- 1- Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient



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RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

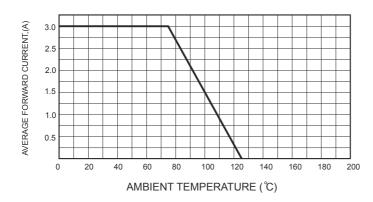


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

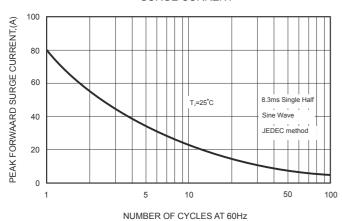


FIG.4-TYPICAL JUNCTION CAPACITANCE

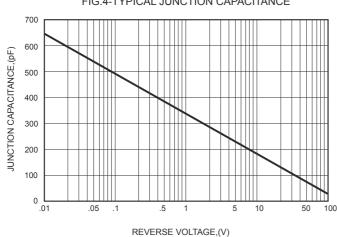


FIG.2-TYPICAL FORWARD

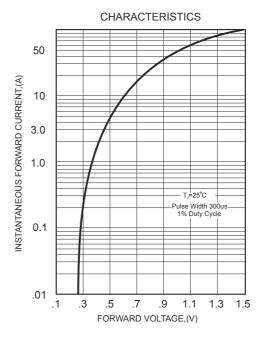


FIG.5 - TYPICAL REVERSE

