WILLAS

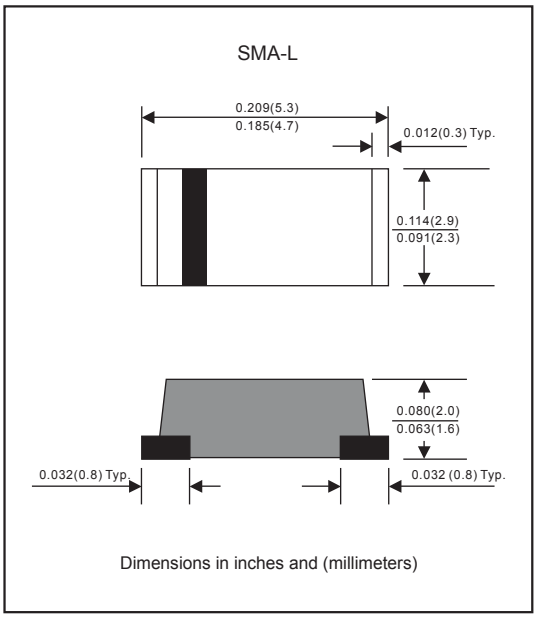
FM120L THRU FM1150L

Pb Free Product

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V- 150V
SMA-L PACKAGE

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.
* Low power loss,high efficiency.
* High current capability, low forward voltage drop.
* High surge capability.
* 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"



Dimensions in inches and (millimeters)

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℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive of inductive load.
For capacitive load, derate current by 20%

RATINGS	SYMBOL	FM120L	FM130L	FM140L	FM150L	FM160L	FM180L	FM1100L	FM1150L	UNIT
Marking Code		SS12	SS13	SS14	SS15	SS16	SS18	S110	S115	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	Volts
Maximum Average Forward Rectified Current	I_O	1.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30								Amps
Typical Thermal Resistance (Note 2)	$R_{\Theta JA}$	88								℃/W
Typical Junction Capacitance (Note 1)	C_J	120								pF
Operating Temperature Range	T_J	-55 to +125			-55 to +150					℃
Storage Temperature Range	TSTG	-55 to +150								℃

CHARACTERISTICS		SYMBOL	FM120L	FM130L	FM140L	FM150L	FM160L	FM180L	FM1100L	FM1150L	UNIT
Maximum Forward Voltage at 1.0A DC		V_F	0.50			0.70		0.85		0.92	Volts
Maximum Average Reverse Current at	@TJ=25℃	I_R	0.5								mAmps
Rated DC Blocking Voltage	@TJ=100℃		10								

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

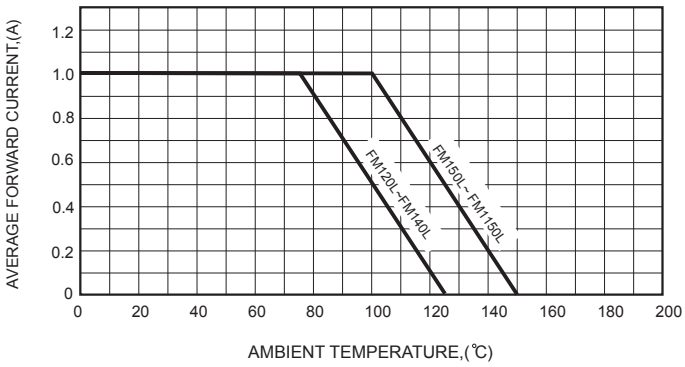

FIG.2-TYPICAL FORWARD CHARACTERISTICS

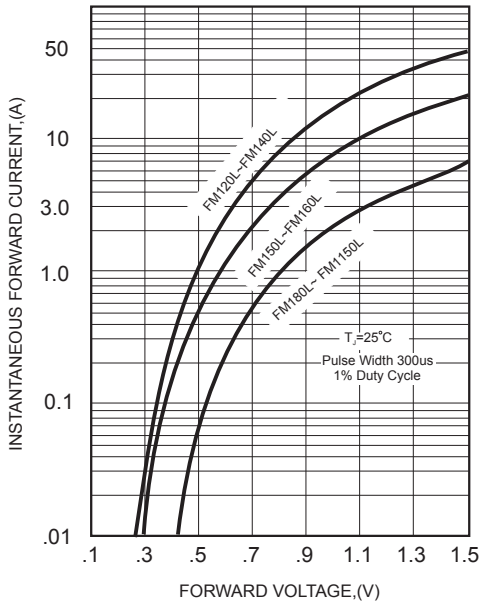

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

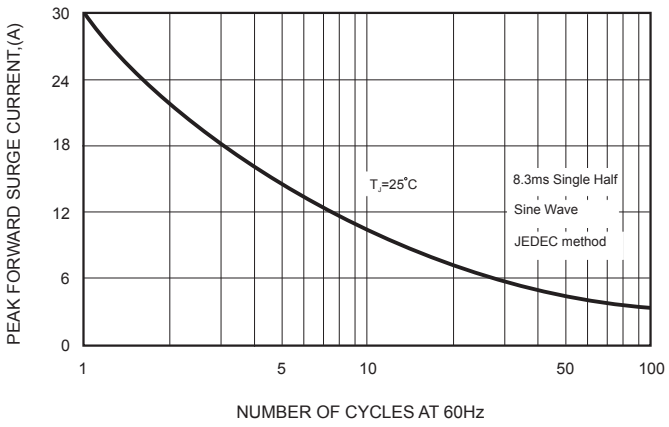

FIG.4-TYPICAL JUNCTION CAPACITANCE

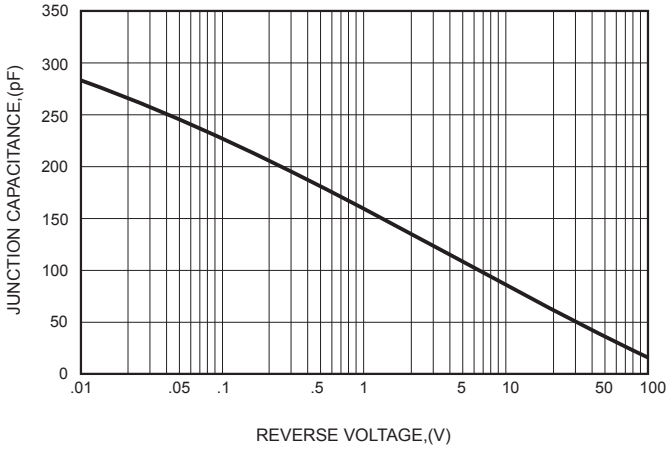

FIG.5 - TYPICAL REVERSE CHARACTERISTICS