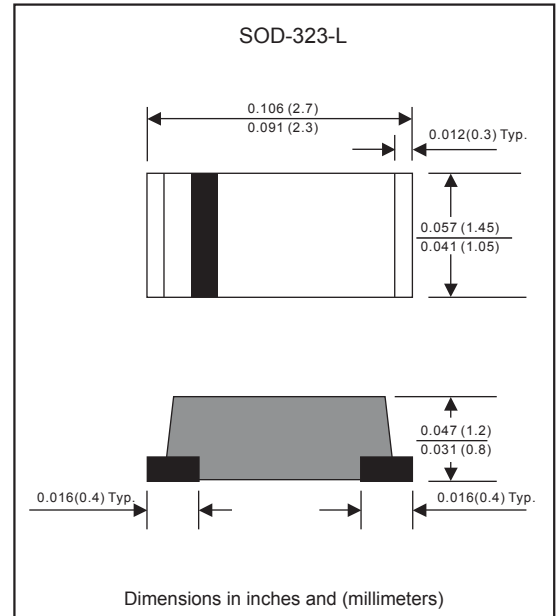


FEATURES

- * 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 standards 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, SOD-323-L
 Epoxy: UL 94V-O rate flame retardant
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
 Mounting position: Any
 Weight: Approximated 0.008 gram.



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%

RATINGS	SYMBOL	FM120-N	FM130-N	FM140-N	FM150-N	FM160-N	FM180-N	FM1100-N	UNIT
Marking Code		12	13	14	15	16	18	10	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	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 _{θJA}	90							°C/W
Typical Junction Capacitance (Note 1)	C _J	120							pF
Operating Temperature Range	T _J	-55 to +125			-55 to +150				°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

CHARACTERISTICS	SYMBOL	FM120-N	FM130-N	FM140-N	FM150-N	FM160-N	FM180-N	FM1100-N	UNIT
Maximum Forward Voltage at 1.0A DC	V _F	0.55			0.70		0.85		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _J =25°C	0.5							mAmps
	@T _J =100°C	10							

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

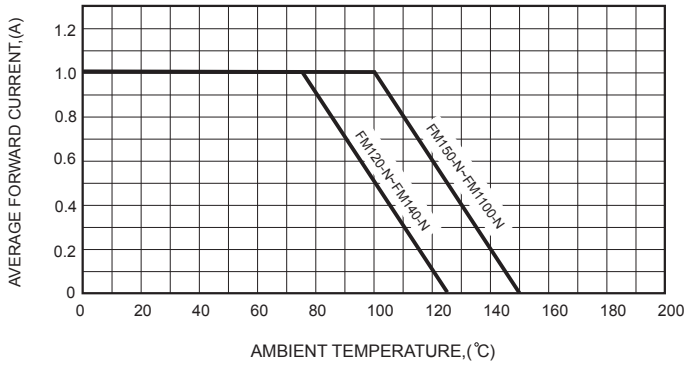


FIG.2-TYPICAL FORWARD CHARACTERISTICS

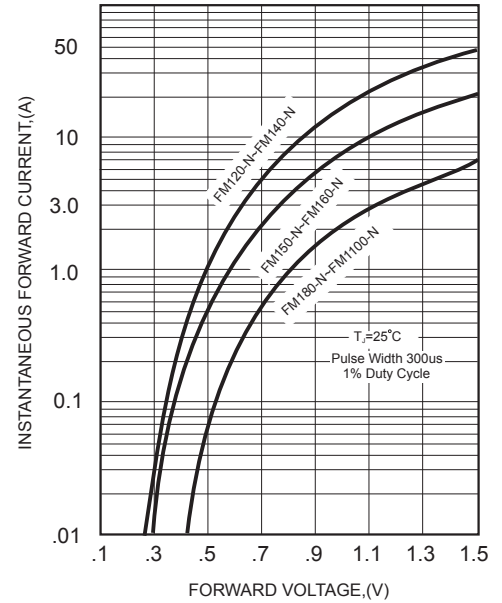


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

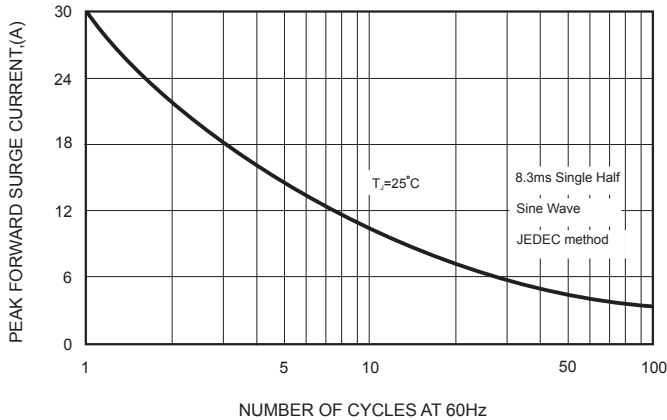


FIG.4-TYPICAL JUNCTION CAPACITANCE

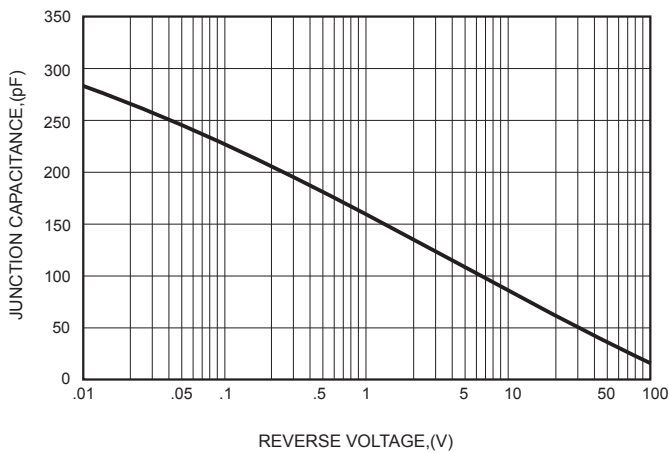


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

