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PRIMARY CHARACTERISTICS

V_{RRM}	20V~100V
I_o	1.0A
V_F	0.55V,0.7V,0.85V
$T_{J,Max}$	125°C,150°C

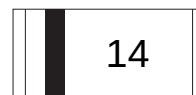
SOD-323-L

PACKAGE

Marking Code :

Please See Table

Ex : FM140-N



Pin1 cathode
Pin2 anode



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.

MECHANICAL DATA

- Case : Molded plastic,SOD-323-L
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

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	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	I _R	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

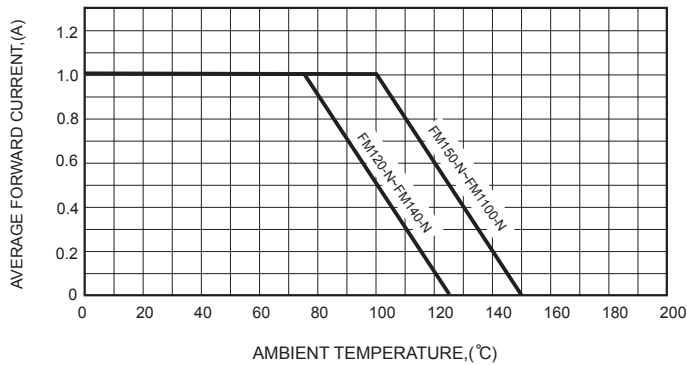


FIG.2-TYPICAL FORWARD CHARACTERISTICS

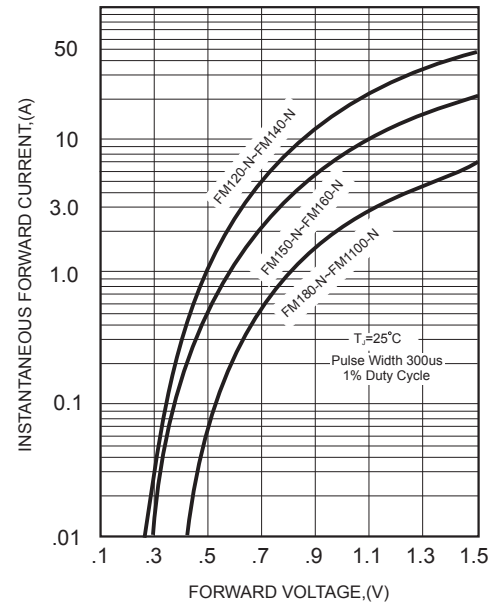


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

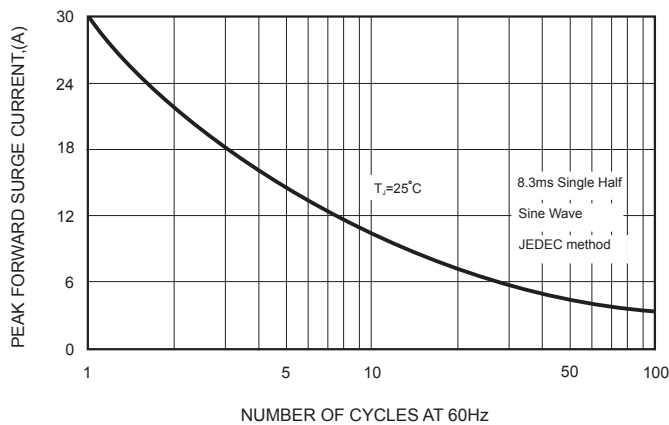


FIG.4-TYPICAL JUNCTION CAPACITANCE

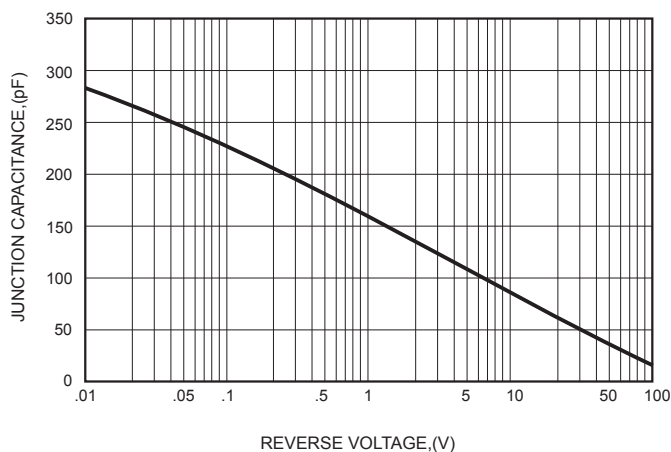
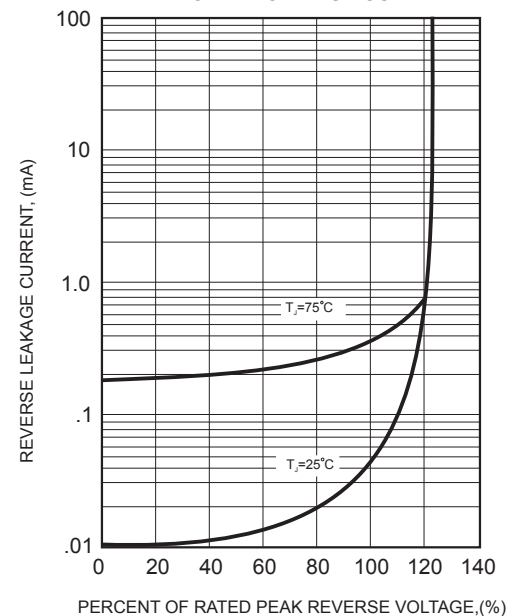
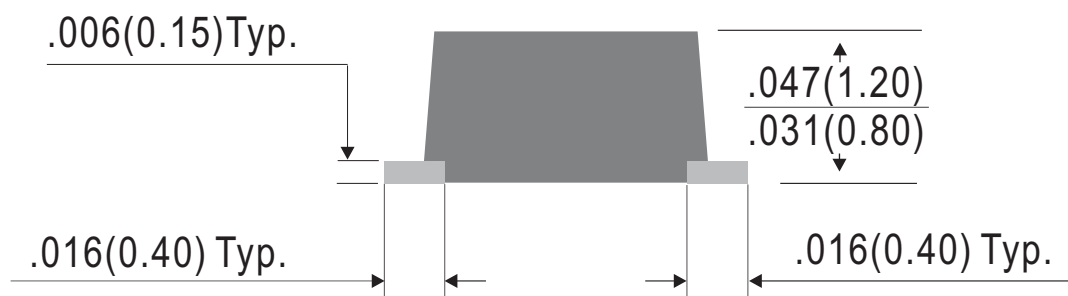
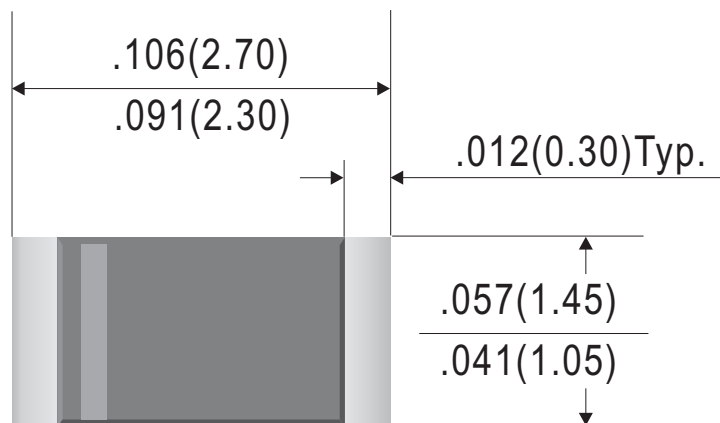


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Outline Drawing

SOD-323-L



Dimensions in inches and (millimeters)

Rev.B

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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