

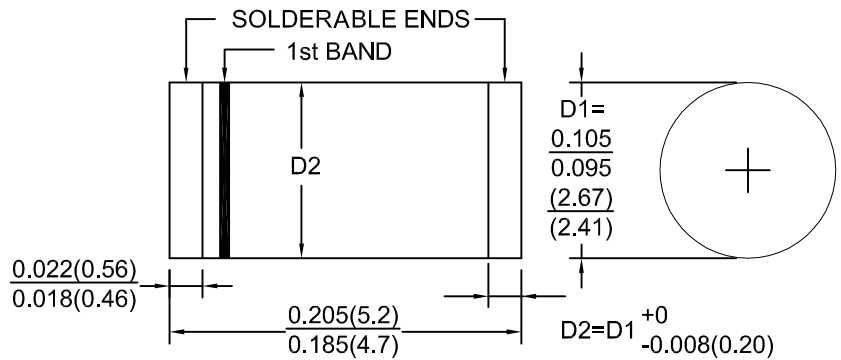
FEATURES:

- Fast switching
- Glass passivated chip
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy
 Terminals : Axial leads, solderable per MIL-STD-202, Method 208
 Polarity : Color band on body denotes cathode end
 Mounting Position : Any
 Weight : 0.116 gram, 0.0046 ounce

MELF/DO-213AB



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

Characteristic	Symbol	FSM 101	FSM 102	FSM 103	FSM 104	FSM 105	FSM 106	FSM 107	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Ta=55° C	I _(AV)	1.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage drop at 1.0 A	V _F	1.3							Volts
Maximum DC reverse current at rated DC blocking voltage Ta=25° C Ta=125° C	I _R	5.0 100.0							μ A
Maximum full load reverse current, full cycle average, Ta=55° C	I _{R(AV)}	50.0							μ A
Maximum reverse recovery time (note 1)	trr	150			250		500		nS
Typical junction capacitance (note 2)	C _j	15							pF
Typical thermal resistance	R _{th-JA}	75.0							° C/W
	R _{th-JL}	30.0							
Operating junction and storage temperature range	T _j , T _{stg}	-65 to +150							° C

NOTES:1. Reverse recovery test condition; I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
 2. Measured at 1MHz and Applied reverse voltage of 4.0V.DC

RATINGS AND CHARACTERISTIC CURVES FSM101 THRU FSM107

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

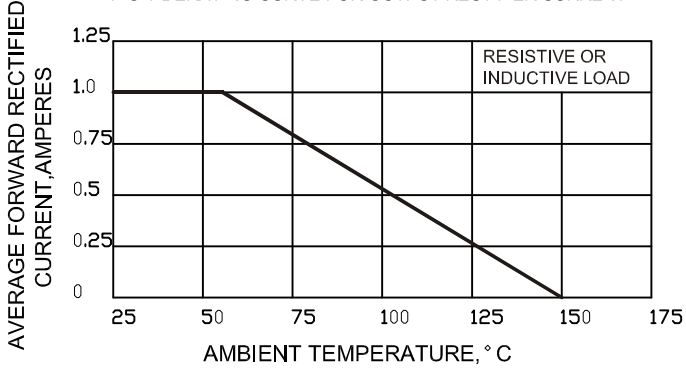


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

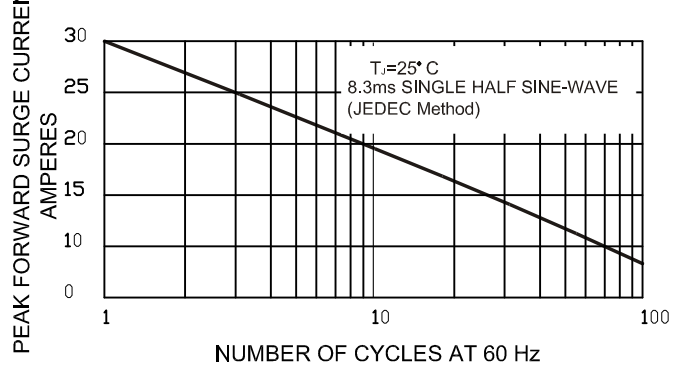


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

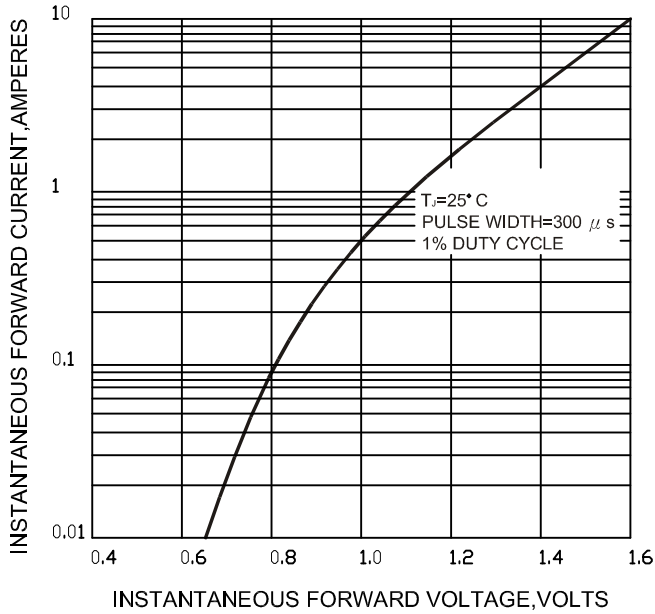


FIG.4-TYPICAL REVERSE CHARACTERISTICS

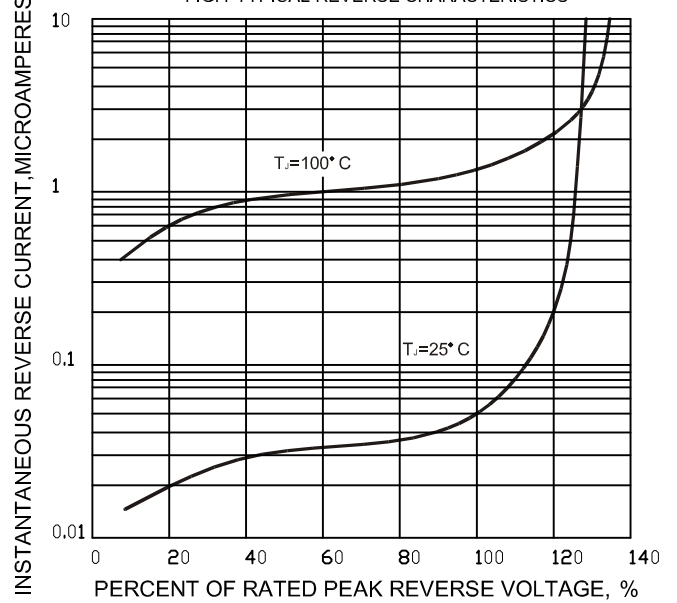


FIG.5-TYPICAL JUNCTION CAPACITANCE

