

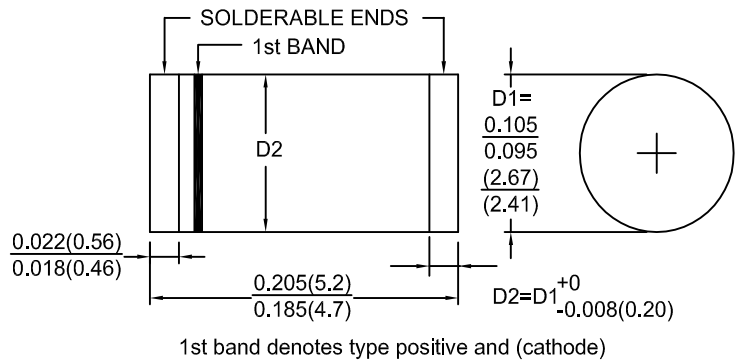


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guard ring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MELF / DO-213AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy
 Terminals : Solder plated, solderable per MIL-STD-750 Method 2026
 Polarity : Blue color band on body denotes cathode
 Weight : 0.116 grams, 0.0046 ounce

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	SM 32	SM 33	SM 34	SM 35	SM 36	Units
Maximum recurrent peak reverse voltage	VRRM	20	30	40	50	60	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	Volts
Maximum average forward rectified current at TL(SEE FIG.1)	I(AV)	3.0					Amps
Peak forward surge current 8.3mm single half sine-wave superimposed on rated load(JEDEC Method)	IFSM	90.0					Amps
Maximum instantaneous forward voltage at 3.0 A(NOTE 1)	VF	0.50	0.55		0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	IR	0.5 20.0					mA
Maximum thermal resistance(NOTE 2)	Rth-JA Rth-JL	55.0 17.0					°C/W
Operating junction temperature range	TJ	-55 to +150					°C
Storage temperature range	Tstg	-55 to +150					°C

NOTES:
 (1) Pulse test: 300 μs pulse width, 1% duty cycle
 (2) P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

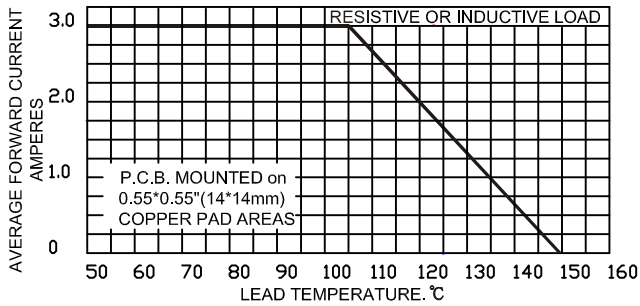


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

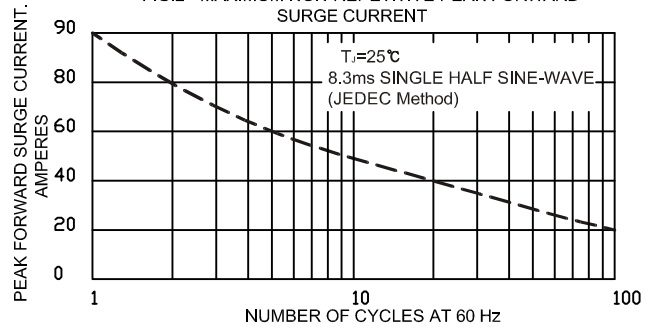


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

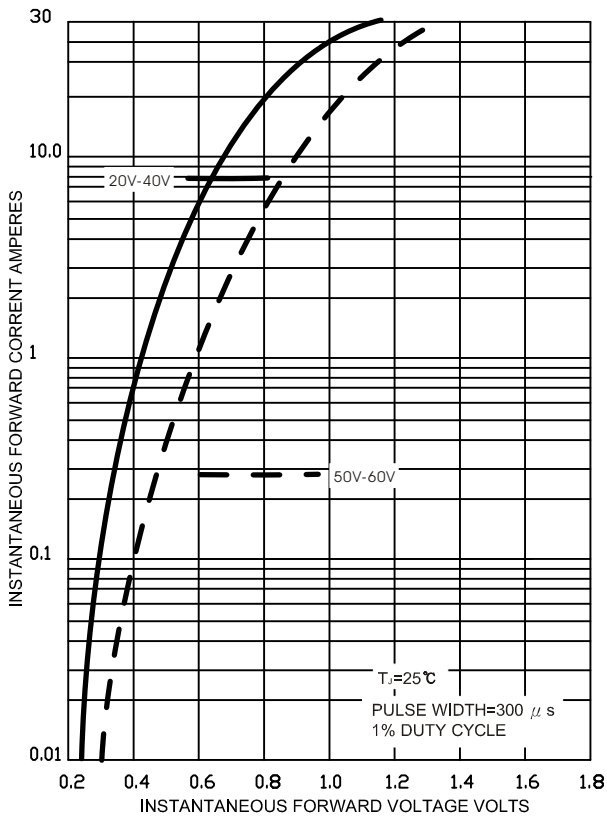


FIG.4-TYPICAL REVERSE CHARACTERISTICS

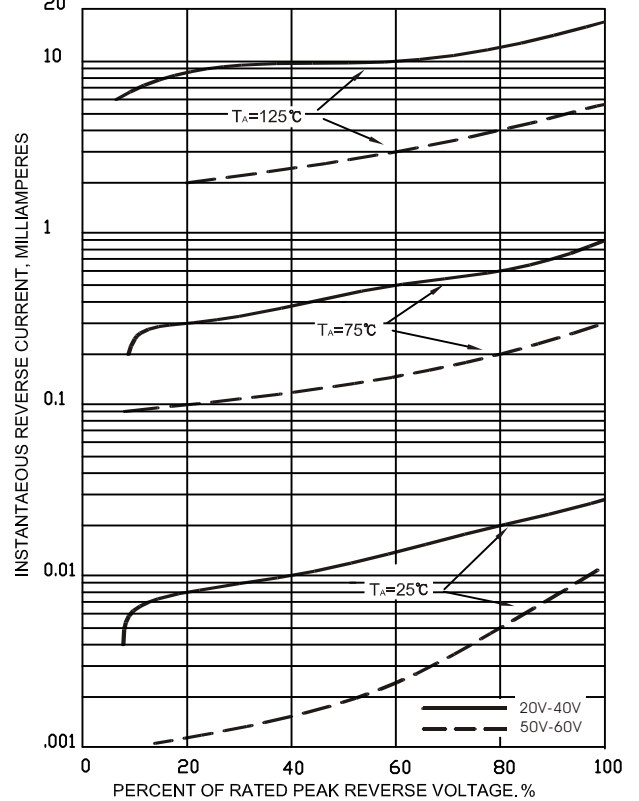


FIG.5-TYPICAL JUNCTION CAPACITANCE

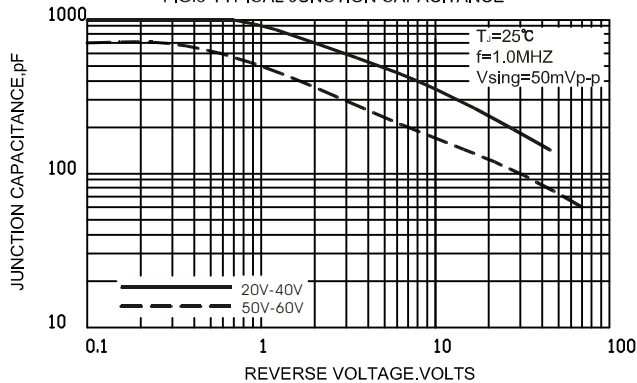
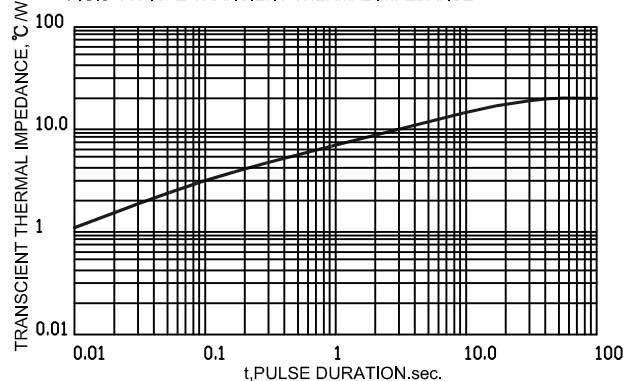


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE





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