



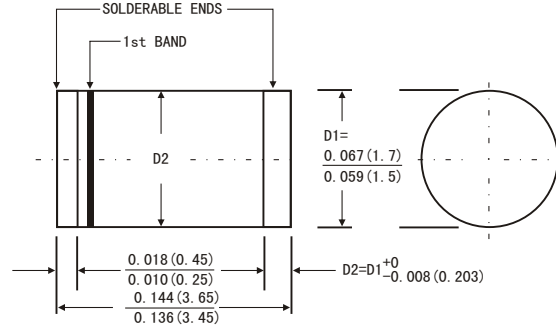
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- 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
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC Mini MELF(DO-213AA) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0005ounce, 0.015 gram

MiniMELF(DO-213AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	LL 5817	LL 5818	LL 5819	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length (see Fig. 1)	I(AV)	1.0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) at T _L =70°C	I _{FSM}	25.0			Amps
Maximum instantaneous forward voltage at 1.0 A(Note 1)	V _F	0.450	0.550	0.600	Volts
Maximum instantaneous forward voltage at 3.1 A(Note 1)	V _F	0.750	0.875	0.900	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	0.2			mA
	T _A =100°C	10.0			
Typical junction capacitance(Note 2)	C _J	80.0			pF
Typical thermal resistance (Note 3)	R _{θ JA}	75.0			°C/W
	R _{θ JL}	30.0			
Operating junction and storage temperature range	T _J /T _{stg}	-55 to +150			°C

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Measured at 1MHz and reverse voltage of 4.0Volts

3.Thermal resistance (from junction to ambient),0.24X0.24" copper pads to each terminals



FIG.1-FORWARD CURRENT DERATING CURVE

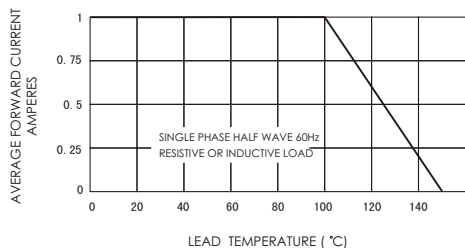


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

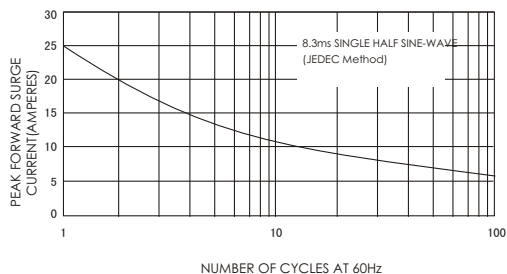


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

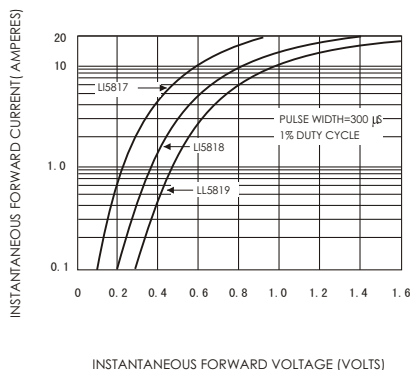


FIG.4-TYPICAL REVERSE CHARACTERISTICS

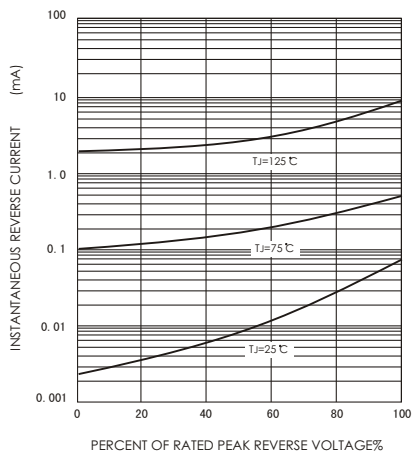


FIG.5-TYPICAL JUNCTION CAPACITANCE

