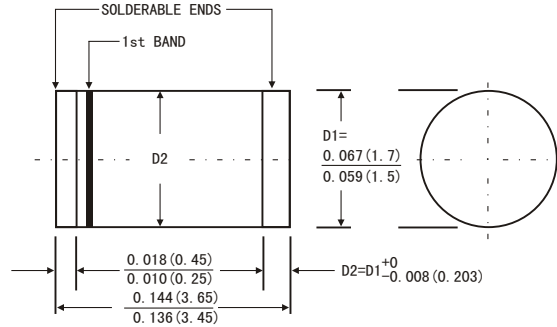


### FEATURES

- 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



### MiniMELF(SDO-213AA)



### MECHANICAL DATA

- Case: JEDEC Mini MELF(SDO-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

### 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	SGL 34-20	SGL 34-30	SGL 34-40	SGL 34-50	SGL 34-60	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	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)	$I_{FSM}$	30.0					Amps
Maximum instantaneous forward voltage at 1.0 A(Note 1 )	$V_F$	0.55		0.70			Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$I_R$	$T_a=25^{\circ}C$					mA
		$T_a=100^{\circ}C$					
Typical junction capacitance(Note 2)	$C_J$	110					pF
Typical thermal resistance (Note 3) (Note 4)	$R_{\theta JA}$ $R_{\theta JL}$	75.0					$^{\circ}C/W$
		30.0					
Operating junction temperature range	$T_J$	-65 to+150					$^{\circ}C$
Storage temperature range	$T_{STG}$	-65 to+150					$^{\circ}C$

Notes: 1.Pulse test: 300  $\mu s$  pulse width,1% duty cycle

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

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

4.Thermal resistance (from junction to terminal),0.24X0.24" copper pads to each terminal

# RATINGS AND CHARACTERISTIC CURVES SGL34-20 THRU SGL34-60

FIG.1-FORWARD CURRENT DERATING CURVE

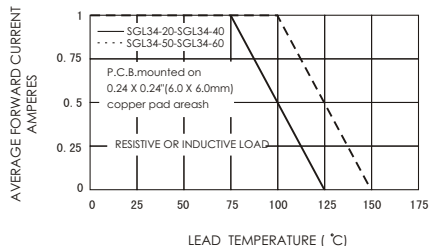


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

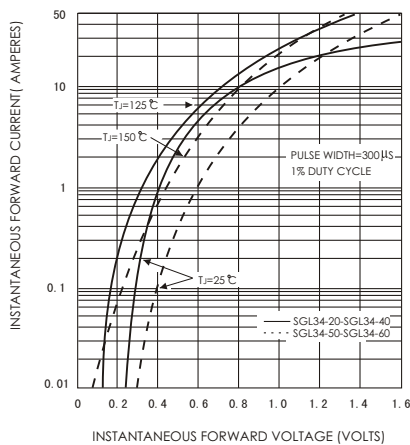


FIG.5-TYPICAL JUNCTION CAPACITANCE

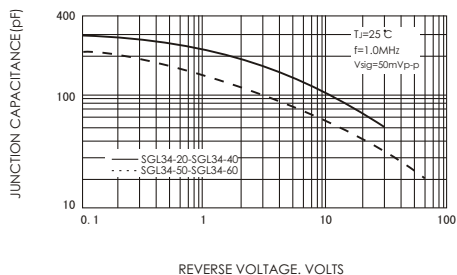


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

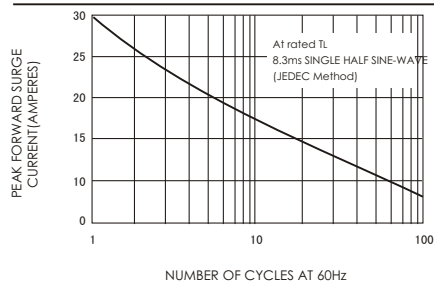


FIG.4-TYPICAL REVERSE CHARACTERISTICS

