DACO SEMICONDUCTOR CO., LTD.

SGL34-20 THRU SGL34-60

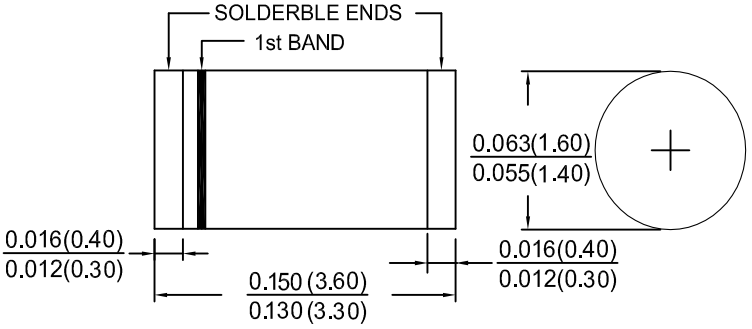
SURFACE MOUNT SCHOTTKY RECTIFIERS

FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection

MINI MELF / DO-213AA

(GL34)



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

Terminals : Plated terminals, solderable per MIL-STD-202 Method 208

Polarity : Blue color band on body denotes cathode

Mounting Position : Any

Weight : 0.015 gram

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	SGL34-20	SGL34-30	SGL34-40	SGL34-50	SGL34-60	Units
Maximum recurrent 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	$I_{(AV)}$	0.8					Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	25					Amps
Maximum instantaneous forward voltage drop at 0.8 A (NOTE 1)	V_F	0.5	0.55		0.7		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1) Ta=25℃ / Ta=100℃	I_R	0.5 / 10					mA / mA
Typical junction capacitance	C_J	80.0					pF
Typical thermal resistance	R_{th-JA} / R_{th-JL}	75.0 / 30.0					℃/W
Operating junction temperature range	T_j	-65 to +125					℃
Storage temperature range	T_{stg}	-65 to +150					℃

NOTE :

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

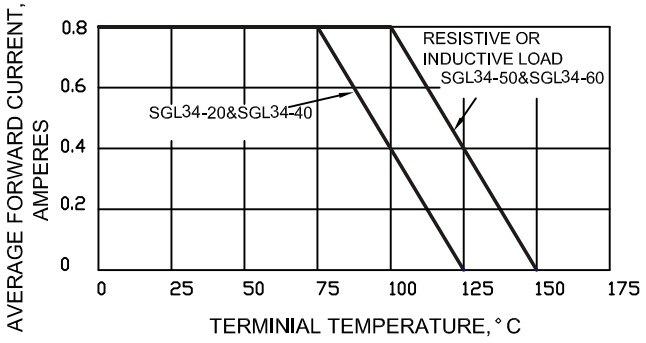


FIG.2-MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT

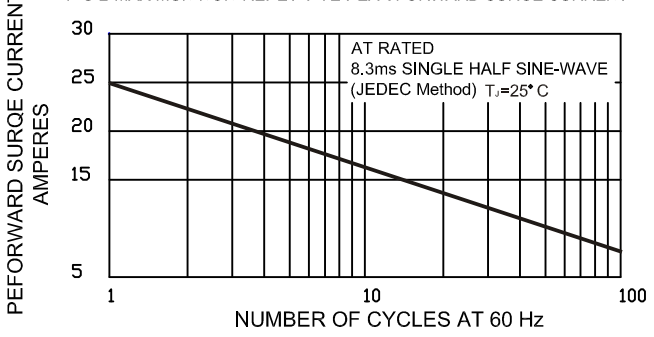


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

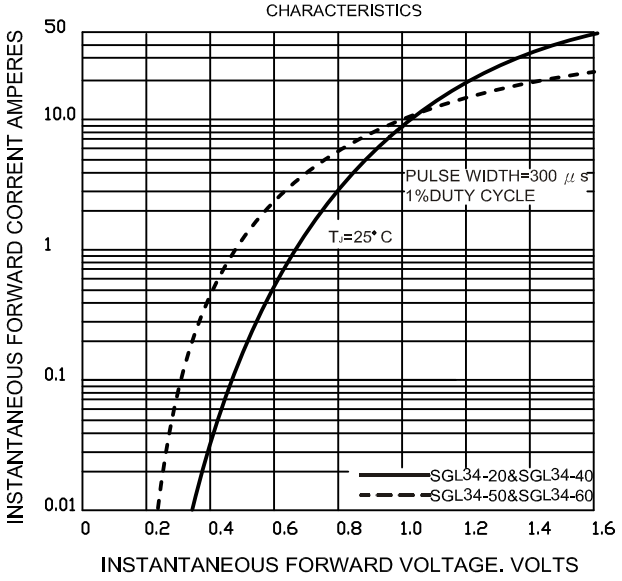


FIG.4-TYPICAL REVERSE CHARACTERISTICS

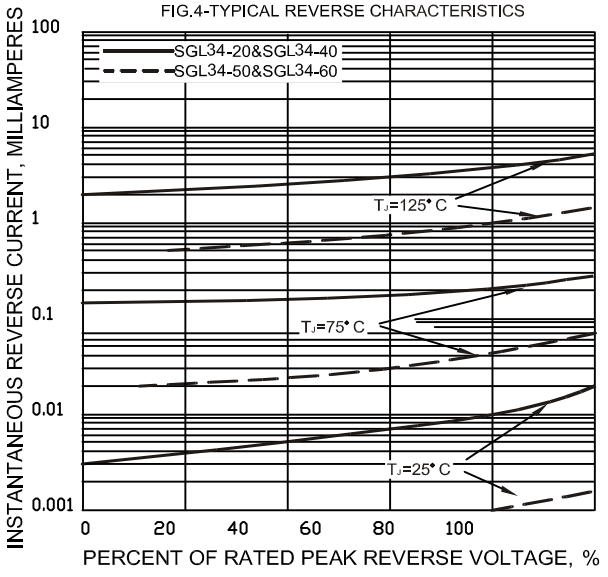
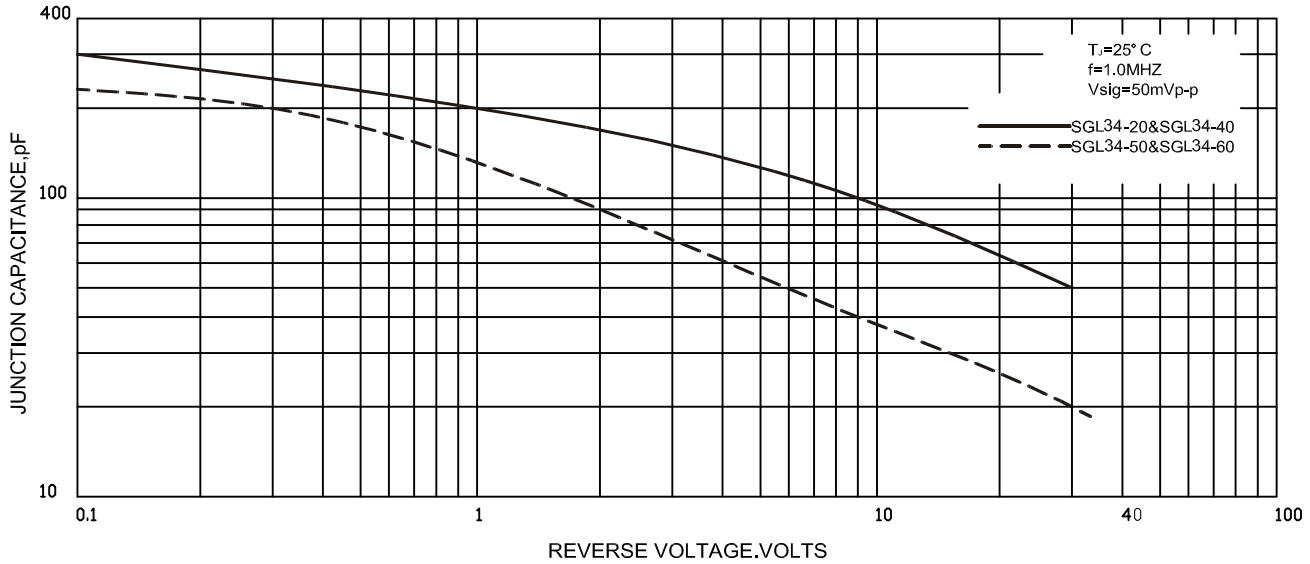


FIG.5-TYPICAL JUNCTION CAPACITANCE



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