

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

MECHANICAL DATA

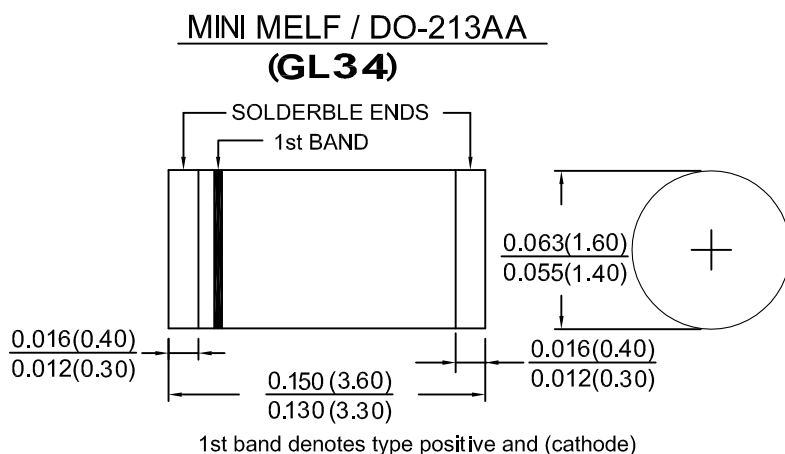
Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

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

Polarity : Silver color band on body denotes cathode

Mounting Position : Any

Weight : 0.015 gram



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	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	0.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	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					°C/W
Operating junction temperature range	T _j	-65 to +125					°C
Storage temperature range	T _{stg}	-65 to +150					°C

NOTE :

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

RATINGS AND CHARACTERISTIC CURVES SGL34-20 THRU SGL34-60

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

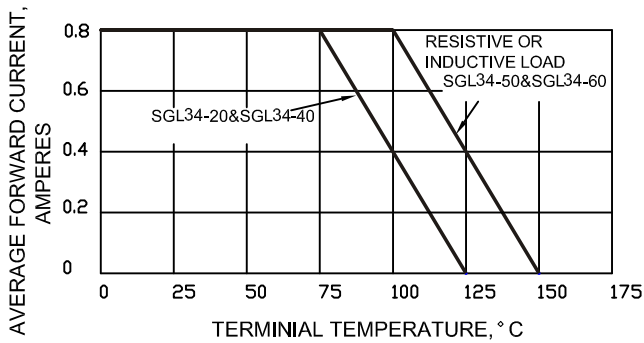


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

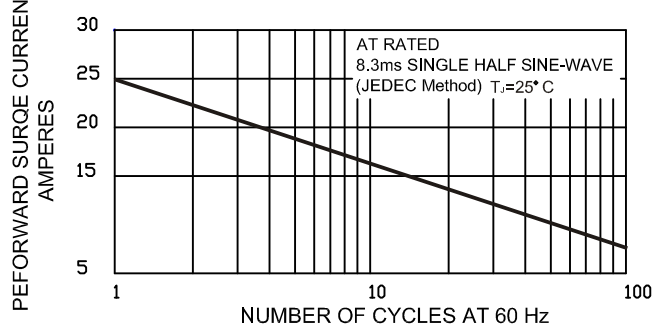


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

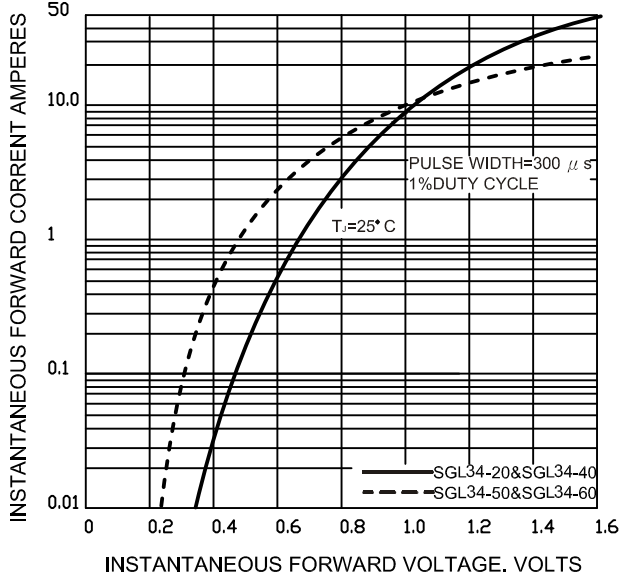


FIG.4-TYPICAL REVERSE CHARACTERISTICS

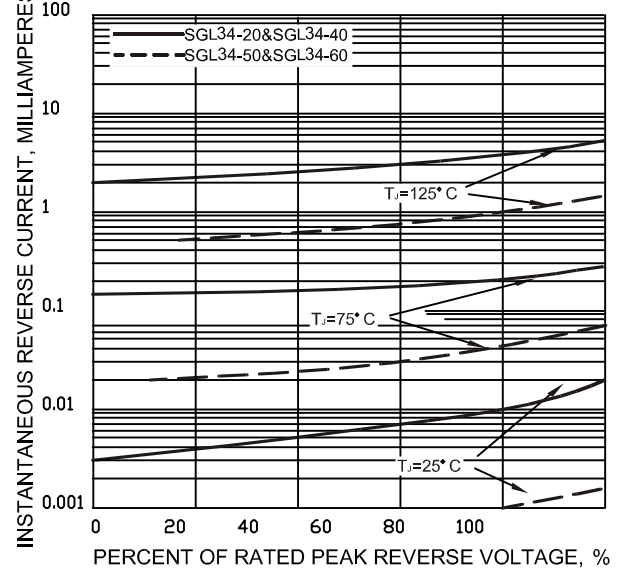


FIG.5-TYPICAL JUNCTION CAPACITANCE

