



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

E-mail: [frontiersales@frontierusa.com](mailto:frontiersales@frontierusa.com)

Web: <http://www.frontierusa.com>

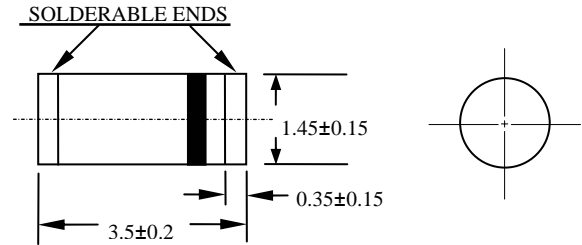
## 0.8A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS SGL34-02-LFR THRU SGL34-06-LFR

### FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V-0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- ROHS

### MECHANICAL DATA

- CASE: TRANSFER MOLDED, DO-213AA (GL34), DIMENSIONS IN MILLIMETERS
- TERMINALS: SOLDERABLE PER MIL-STD-750, METHOD 2026
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 0.036 GRAM



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SGL34-02-LF R	SGL34-03-LF R	SGL34-04-LF R	SGL34-05-LF R	SGL34-06-LF R	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	20	30	40	50	60	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	14	21	28	35	42	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	20	30	40	50	60	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_T=75^\circ\text{C}$	$I_O$	0.8					A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	10					A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	80					PF
MAXIMUM THERMAL RESISTANCE $R_{\theta_{jL}}$ (NOTE 2)	$R_{\theta_{jL}}$	30					°C/W
$R_{\theta_{jA}}$ (NOTE 2)	$R_{\theta_{jA}}$	75					
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150					°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 125					°C

### ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SGL34-02-LF R	SGL34-03-LF R	SGL34-04-LF R	SGL34-05-LF R	SGL34-06-LF R	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O$ DC	$V_F$	0.5			0.7		V
MAXIMUM REVERSE CURRENT AT $T_j=25^\circ\text{C}$ $T_j=100^\circ\text{C}$	$I_R$	0.5			10		mA

NOTE : 1. MEASURED AT 1.0 MHz AND APPLIED REVERSE VOLTAGE OF 4.0V D.C.

2. THERMAL RESISTANCE JUNCTION TO TERMINAL 6.0 mm x 6.0 mm COPPER PADS TO EACH TERMINAL

# RATINGS AND CHARACTERISTIC CURVE SGL34-02-LFR THRU SGL34-06-LFR

FIG. 1 - FORWARD CURRENT

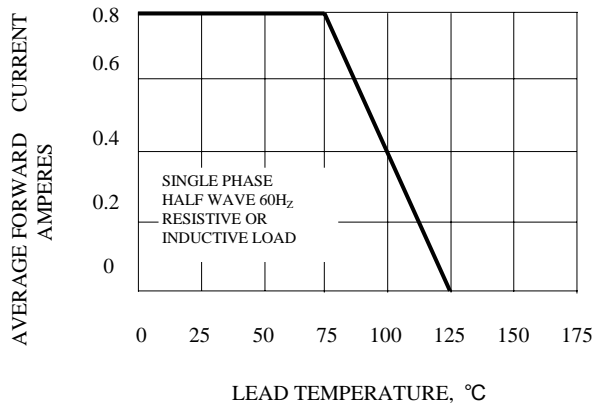


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

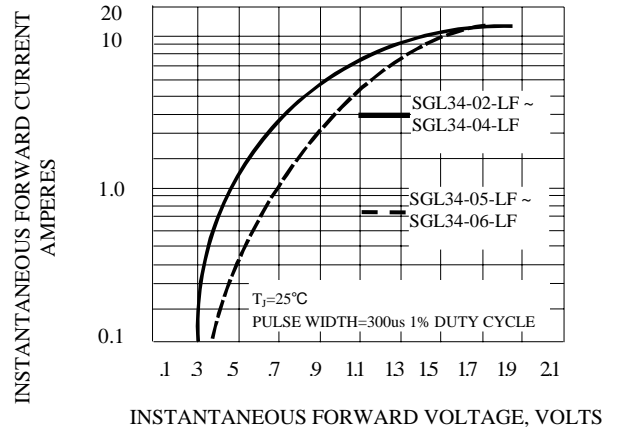


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

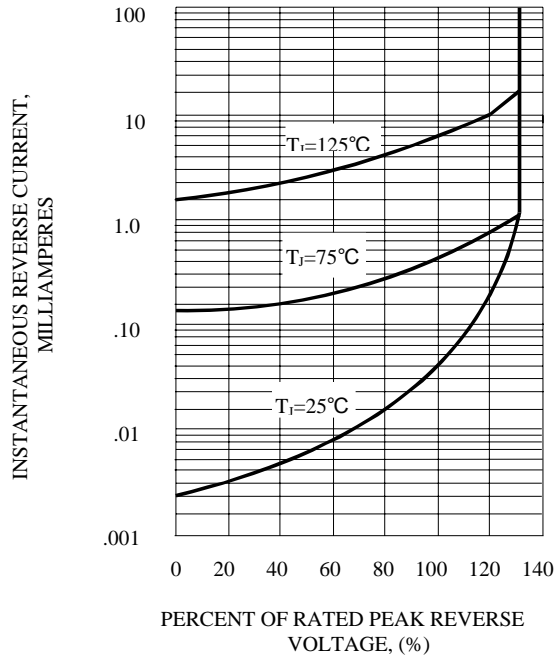


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

