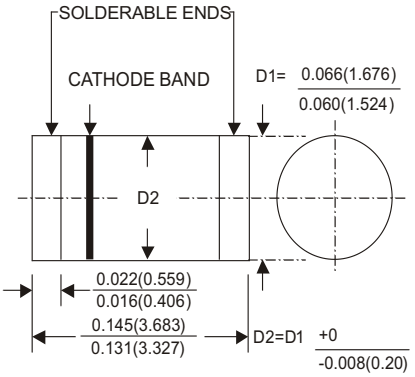
HGL34A thru HGL34M

SURFACE MOUNT GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

DO-213AA / MINI MELF



Dimension in inches (millimeters)

FEATURES

- Ldeal for surface mounted applications
- Easy pick and place
- Low leakage current
- Glass passivated chips
- Fast switching
- Metallurgically bonded construction
- High temperature soldering guaranteed：
  250°C/10 seconds/.375″ , (9.5mm) lead lengths

MECHANICAL DATA

Case：Molded plastic use UL94V-0 recoqnized flame retardant epoxy
Terminals：Plated terminals, solderable per MIL-STD-202, Method208
Polarity：Red Color band on body denotes cathode
Mounting position：Any
Weight：0.036gram

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified
Single phase, half sine wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

	SYMBOL	HGL 34A	HGL 34B	HGL 34D	HGL 34G	HGL 34J	HGL 34K	HGL 34M	UNITS
Maximum Current Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current T_T=60°C	$I_{(AV)}$	0.5							Amps
Peak Forward Surge Current Single Sine-Wave on Rated Load(JEDEC Method)	I_{FSM}	10							Amps
Maximum Instantaneous Forward Voltage Drop at 0.5A DC	V_F	1.25				1.35	1.5		Volts
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=125°C	I_R	5.0 100							μA
Maximum Reverse Recovery Time	T_{RR}	50				75			nS
Typical Junction Capacitance	C_J	15				12			pF
Operating Junction Temperature Range	T_J	-65 to +150							°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

NOTES：
1. Reverse Recovery Test Conditions：I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C

SURFACE MOUNT GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

RATING AND CHARACTERISTICS CURVES HGL34A THRU HGL34M

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

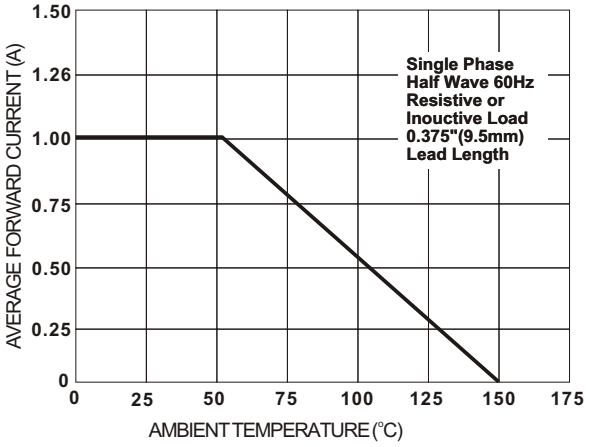


FIG. 2 - MAXIMUM NON - REPETITIVE PEAK FORWARD SURGE CURRENT

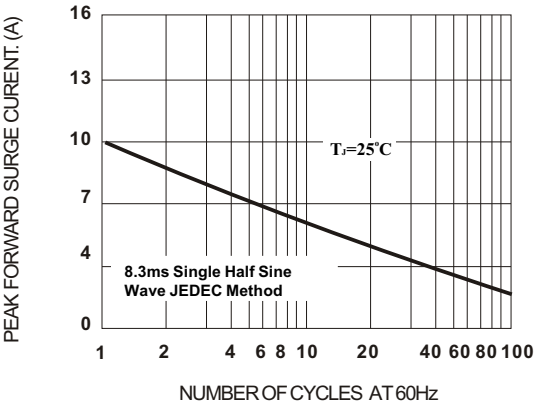


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

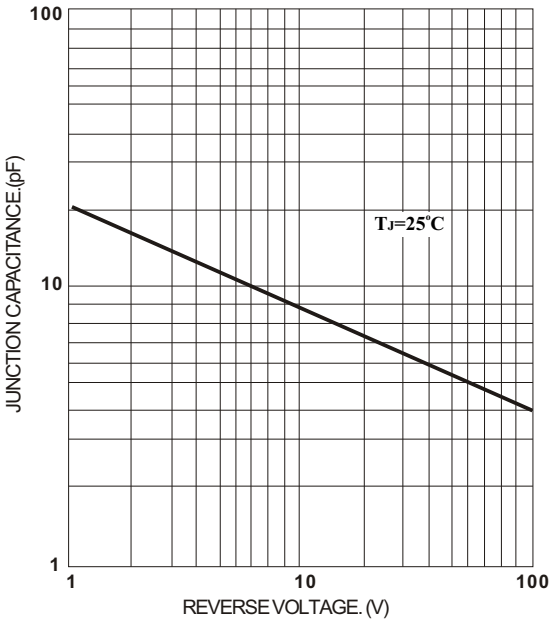


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

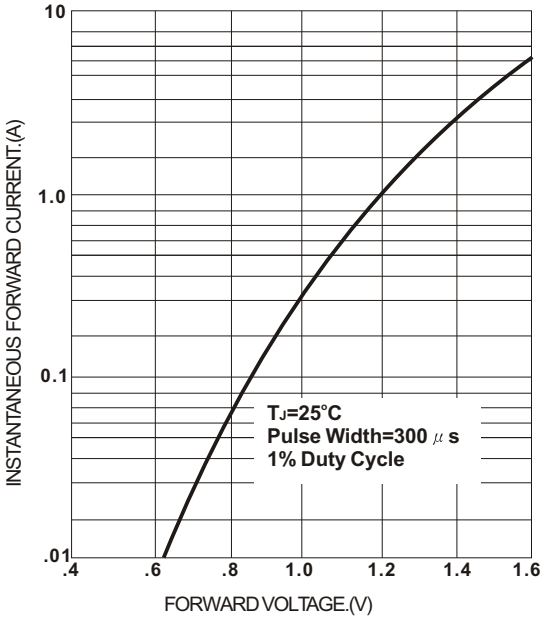
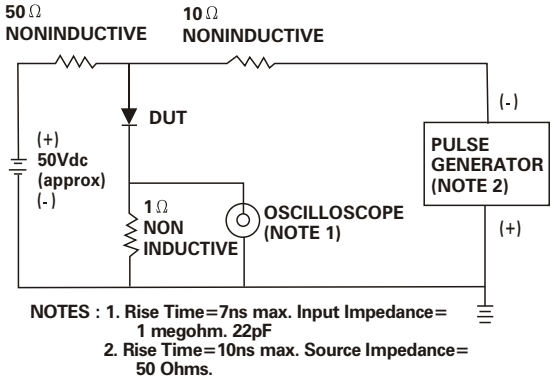


FIG. 5 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time=7ns max. Input Impedance= 1 megohm. 22pF
2. Rise Time=10ns max. Source Impedance= 50 Ohms.