



HA11G THRU HA18G

1.0 AMP. GLASS PASSIVATED HIGH EFFICIENCY RECTIFIERS

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FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any
- * Weight: 0.20 grams

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
1.0 Ampere

R-1

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Rating 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%

TYPE NUMBER	SYMBOLS	HA 11G	HA 12G	HA 13G	HA 14G	HA 15G	HA 16G	HA 17G	HA 18G	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V	
Maximum D. C Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @ $T_A = 40^\circ C$	$I_{F(AV)}$	1.0								A	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25								A	
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0			1.3		1.7			V	
Maximum D. C Reverse Current @ $T_A = 25^\circ C$ at Rated D. C. Blocking Voltage @ $T_A = 125^\circ C$	I_R	5.0				100					μA μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50					75				nS
Typical Junction Capacitance (Note 2)	C_J	20					15				pF
Operating and Storage Temperature Range	T_J, 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 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (HA11G THRU HA18G)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

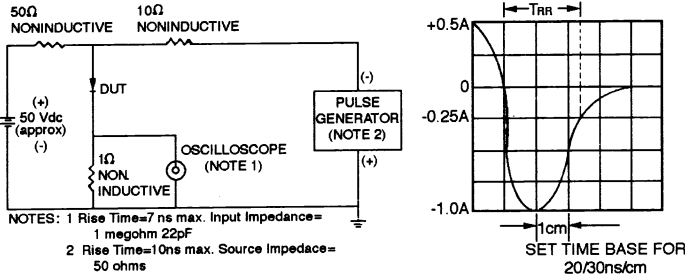


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

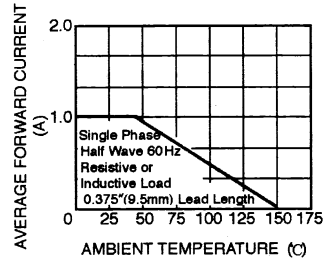


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

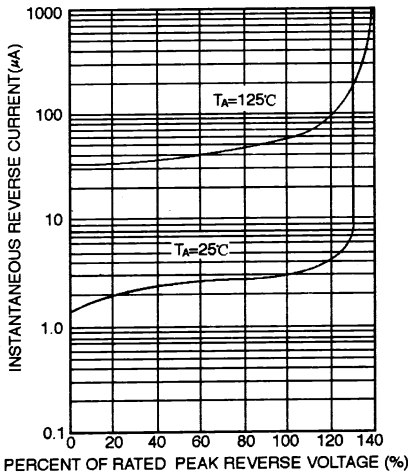


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

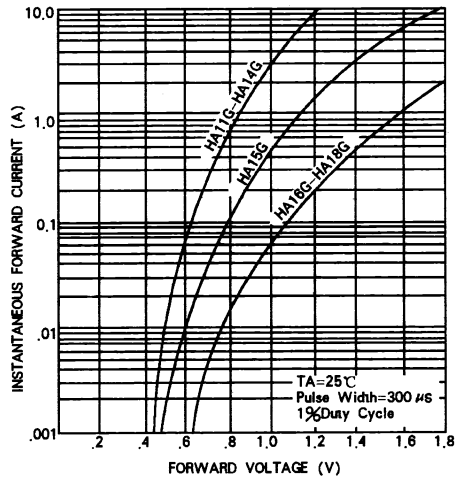


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

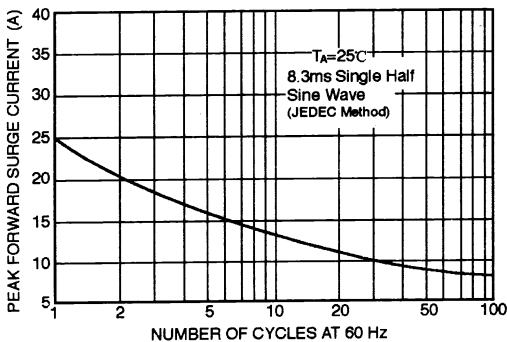


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

