

HEM101 THRU HEM108

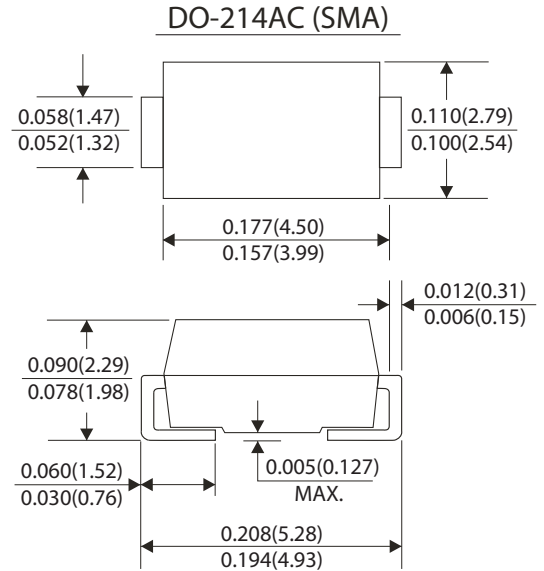
CURRENT 1.0 Ampere
VOLTAGE 50 to 1000 Volts

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching
- Low leakage

Mechanical Data

- Case : JEDEC DO-214AC(SMA)molded plastic body
- Lead : Solder Plated, solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

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

	Symbols	HEM 101	HEM 102	HEM 103	HEM 104	HEM 105	HEM 106	HEM 107	HEM 108	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length T _A =50°C	I <sub(av)< sub=""></sub(av)<>	1.0								Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0								Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.0		1.3		1.7			Volts	
Maximum DC Reverse Current at rated DC blocking voltage	I _R	5.0								μA
Maximum full load reverse current full cycle average. 0.375"(9.5mm) lead length at T _L =55°C		100								
Maximum reverse recovery time (Note 1)	T _{rr}	50				75			ns	
Typical junction capacitance (Note 2)	C _J	20				15			pF	
Operating Junction and Storage temperature Range	T _J T _{STG}	-55 to +150								°C

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES HEM101 THRU HEM108

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

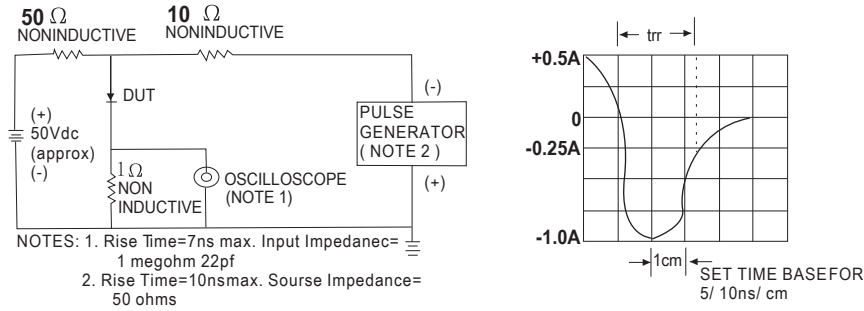


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

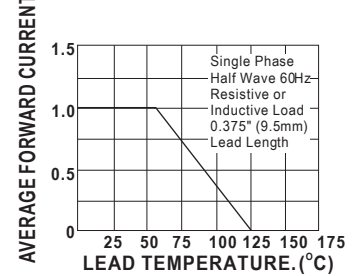


FIG.3- TYPICAL REVERSE CHARACTERISTICS

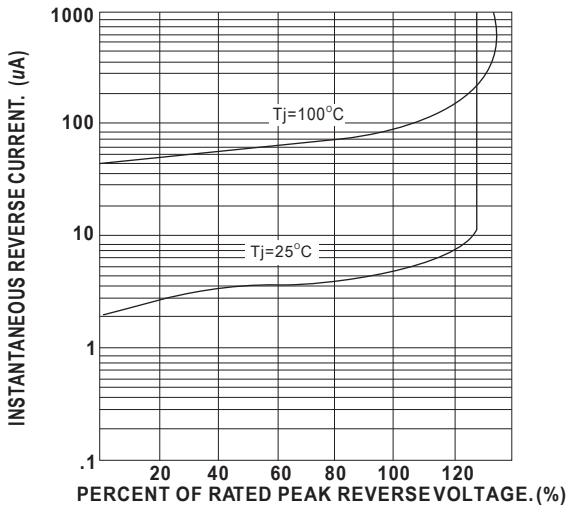


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

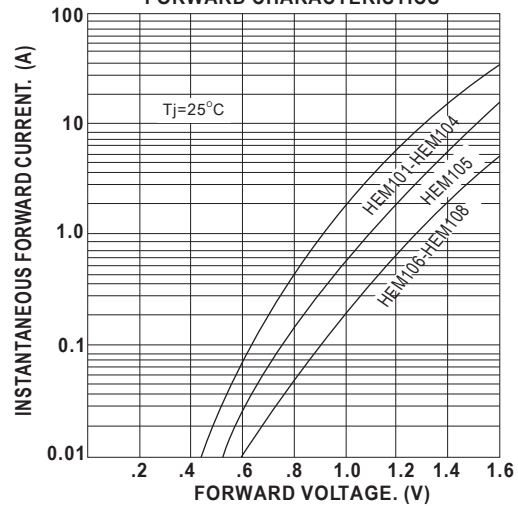


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

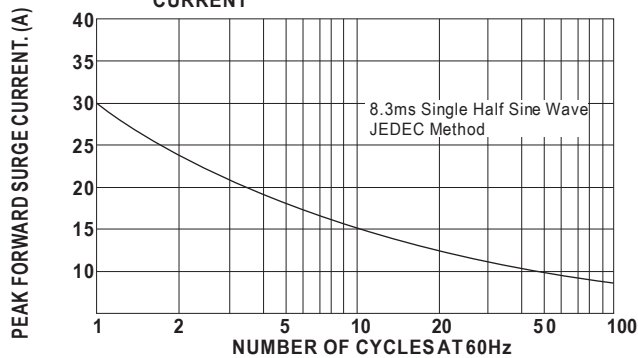


FIG.6- TYPICAL JUNCTION CAPACITANCE

