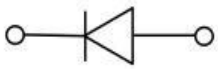
H1HV12

High Efficient Rectifier

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High frequency
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C
- AEC-Q101 qualified available
- Automotive product No.: base P/N-H



Typical Application

For use in high frequency rectification of power supply, inverters, converters, and freewheeling diodes for consumer and telecommunication.

Mechanical Data

- Package: DO-214AC(SMA)
  Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	H1HV2
Repetitive Peak Reverse Voltage	V_{RRM}	V		1200
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, Ta(FIG 1)	1.0
Surge(Nonrepetitive)Forward Current	I_{FSM}	A	60HZ Half-sine wave, 1 cycle, Ta=25℃	25
Storage Temperature	T_{stg}	℃		-55 ~ +150
Junction Temperature	T_j	℃		-55 ~ +150

■ Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	Symbol	Unit	Conditions		H1HV12
Peak Forward Voltage	V_{FM}	V	I_{FM} =1.0A	Tj=25℃	1.70
				Tj=125℃	1.35
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	Ta=25℃	5.0
	I_{RRM2}			Ta=125℃	100
reverse recovery time	Trr	ns	I_F=0.5A,I_R=1.0A,I_{rr}=0.25A		75
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		110
Typical junction capacitance	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		15

■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

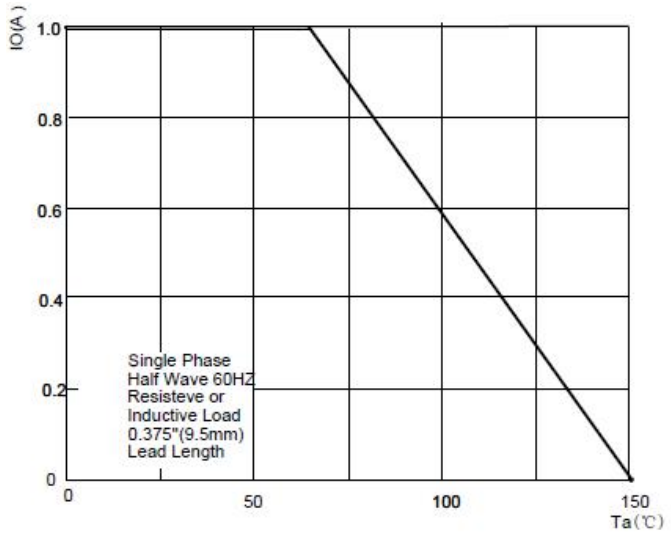


FIG2:Surge Forward Current Capability

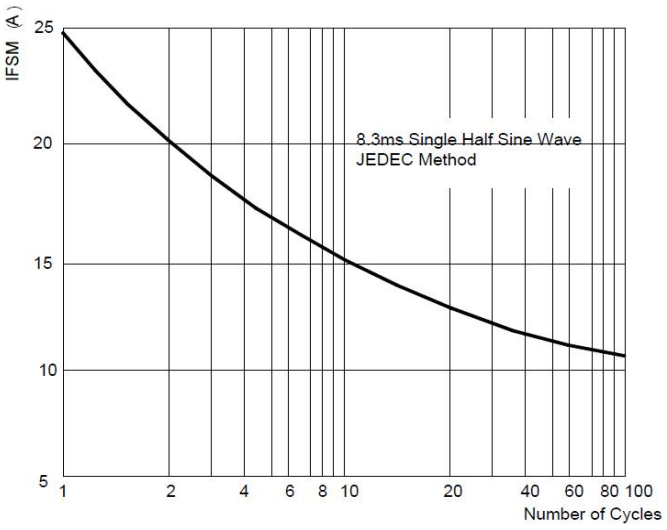


FIG3:Instantaneous Forward Voltage

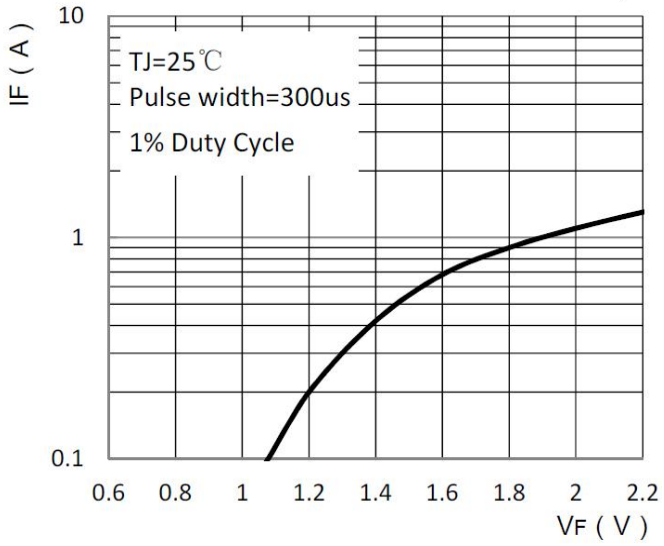


FIG4:Typical Reverse Characteristics

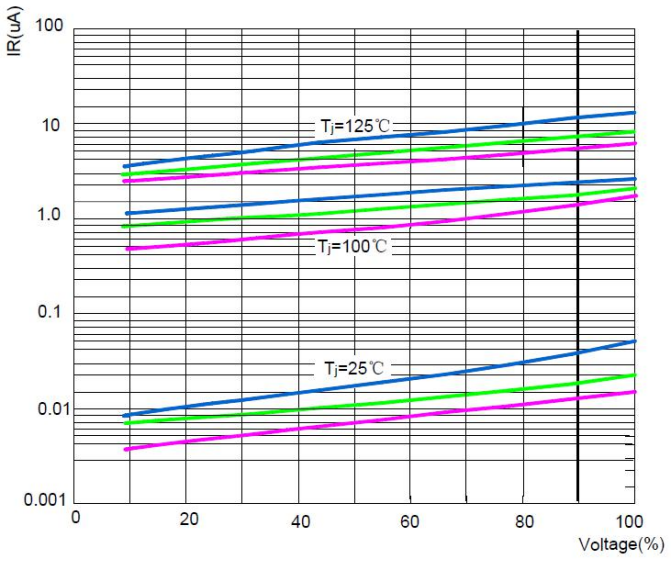
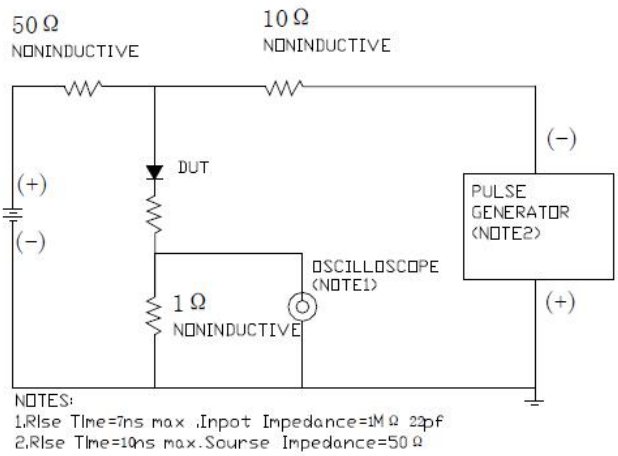
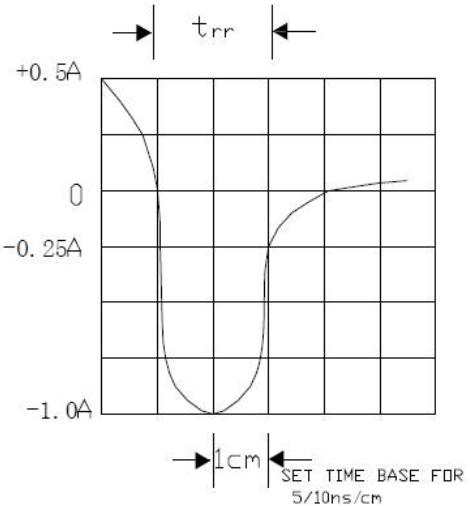


FIG5:Diagram of circuit and Testing wave form of reverse recovery time

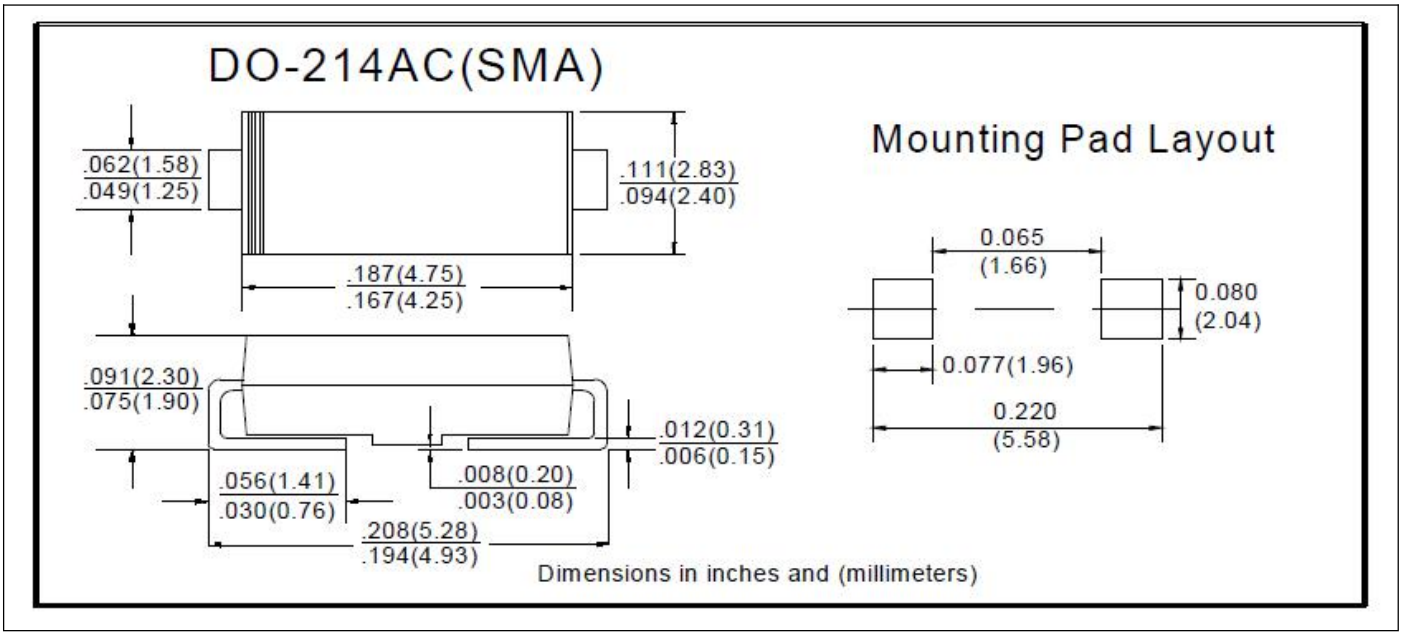




■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
H1HV12	DO-214AC(SMA	5000	10000	80000	13” reel
H1HV12	DO-214AC(SMA	7500	15000	120000	13” reel

■ Outline Dimensions



IMPORTANT NOTICE AND DISCLAIMER

AM RESERVES THE RIGHT TO MAKE CHANGES TO ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE. CUSTOMERS SHOULD OBTAIN AND CONFIRM THE LATEST PRODUCT INFORMATION AND SPECIFICATIONS BEFORE FINAL DESIGN PURCHASE OR USE.

AM disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datesheet or in any other disclosure relating to any product.

All information are provided as-is, even it has qualified by the AEC-Q101 which satisfy industrial application requirement, except as expressly stated in this data sheet is applied for automotive grade, AM make no warranties, representation or guarantee, whether express, implied or statutory, including, without limitation, regarding any merchantability, satisfactory quality, or fitness for a particular purpose with respect to AM.

Am does not assume any liability or compensation for any application assistance or customer product design, and make no warranty or accept any liability with products, which are purchased or used for any unintended or unauthorized application.

Except as expressly indicated in writing, AM products are not designed for use in medical, life-saving, or lifesustaining applications or for any other application in which the failure of the AM product could result in personal injury or death. Customers using or selling AM products not expressly indicated for use in such applications do so at their own risk. Please contact authorized AM personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of AM. Product names and markings noted herein may be trademarks of their respective owners.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Rectifiers ***category:***

Click to view products by amsem ***manufacturer:***

Other Similar products are found below :

70HFR40 FR105 R0 RL252-TP 1N5397 1N4005-TR 1N4007-BP UFS120Je3/TR13 20ETS12S RRE02VS6SGTR MS306 A1N5404G-G CRF02(T5L,TEMQ) ACGRB207-HF CLH07(TE16L,Q) CLH03(TE16L,Q) 1N5395-TP UES1302 ACGRC307-HF ACEFC304-HF DZ-1380 85HFR60 40HFR60 70HF120 85HFR80 SCF7500 SM100 ACGRA4001-HF SKN70/08 NTE5819 NTE5827 NTE5828 NTE5911 NTE5915 NTE6104 NTE6163 NTE6164 NTE6165 NTE6364 TSD3G SET130312 NRVUS110VT3G UES1106 UES1306 NRVUS240VT3G D5FE60-5063 R4000GPS-TP D4015L56TP UES1306HR2 FX20K120 D20XB60-7101