

HIGH VOLTAGE FAST RECOVERY RECTIFIER
VOLTAGE RANGE 1600 Volts CURRENT 1.0 Ampere

FEATURES

- *Fast switching
- *Low reverse leakage
- *High current capability
- *High surge capability
- *High reliability

MECHANICAL DATA

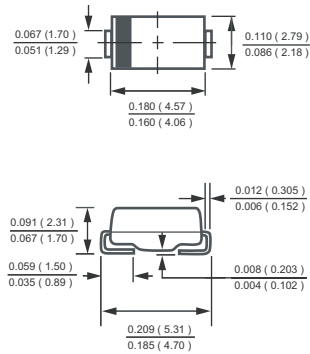
- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

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%.



DO-214AC



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	HFM1600	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1600	Volts
Maximum RMS Volts	VRMS	1120	Volts
Maximum DC Blocking Voltage	VDC	1600	Volts
Maximum Average Forward Rectified Current	Io	1.0	Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30	Amps
Typical Current Squared Time	I ² t	3.74	A ² S
Typical junction capacitance (Note 2)	Cj	15	pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150	°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HFM1600	UNITS
Maximum Instantaneous Forward Voltage at 0.2A DC	V _F	3.5	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	TA = 25°C	3.0 uAmps
		TA = 100 °C	5.0 uAmps
Maximum Reverse Recovery Time (Note 1)	t _{rr}	75	nSec

NOTES : 1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2019-09
REV:O

RATING AND CHARACTERISTICS CURVES (HFM1600)

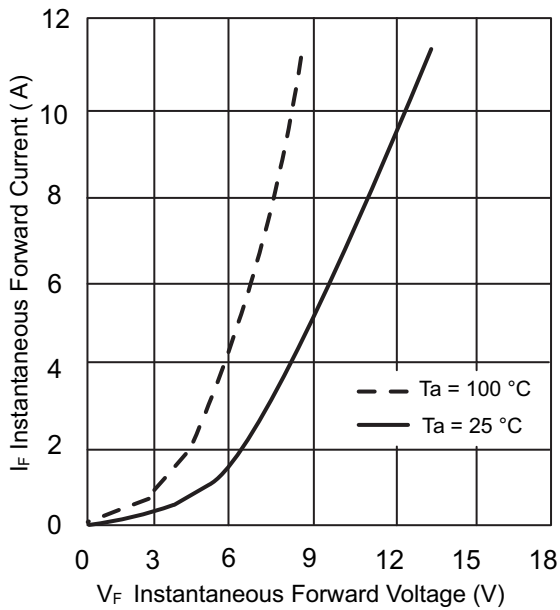


FIG 1: TYPICAL FORWARD CHARACTERISTIC

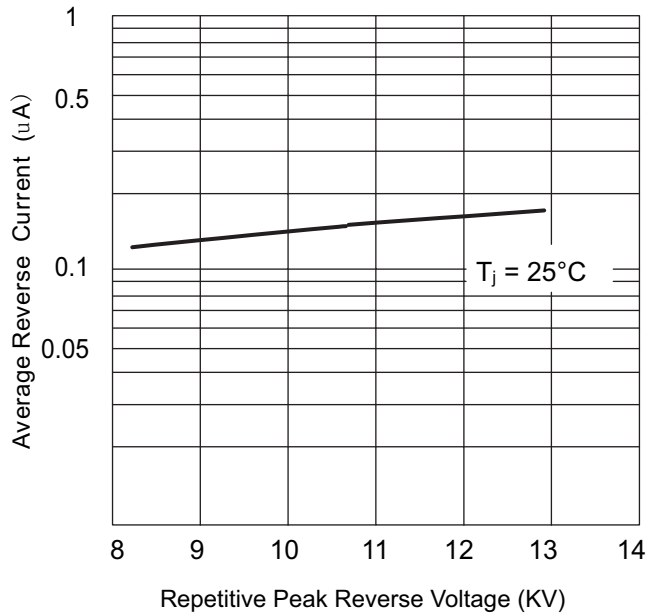


FIG 2: REVERSE CHARACTERISTIC [VR-IR]

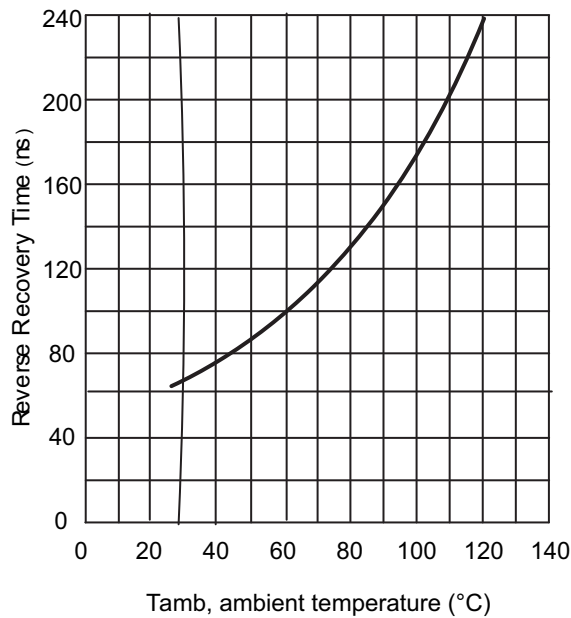


FIG 3: REVERSE RECOVERY TIME CHARACTERISTIC [Ta-Trr]

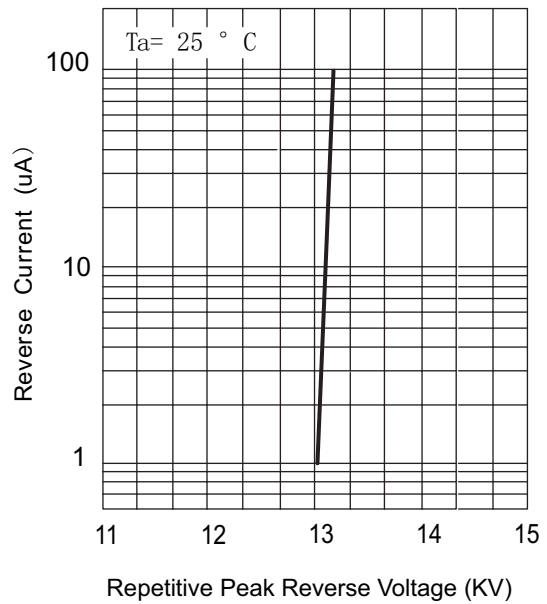


FIG 4: REVERSE CHARACTERISTIC [Vz-Iz]

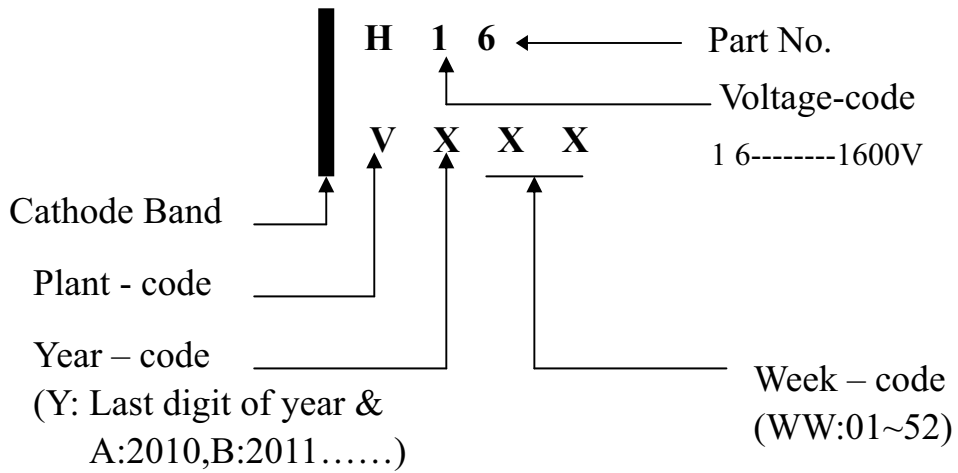


Attachment information about HFM1600

1. Internal Circuit



2. Marking on the body



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-W	7,500	15,000	---	---	330	360*355*360	120,000	15.2

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-T	2,000	8,000	---	---	178	390*205*310	64,000	7.8

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.