

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

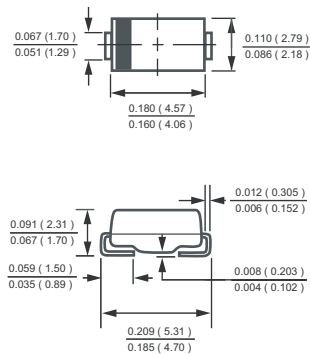
- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

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 $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	HFM1600	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1600	Volts
Maximum RMS Volts	V_{RMS}	1120	Volts
Maximum DC Blocking Voltage	V_{DC}	1600	Volts
Maximum Average Forward Rectified Current	I_o	1.0	Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	Amps
Typical Current Squared Time	I^2t	3.74	A^2S
Typical junction capacitance (Note 2)	C_j	15	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ 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	3.0	μAmps
		5.0	μAmps
Maximum Reverse Recovery Time (Note 1)	t_{rr}	75	nSec

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

2019-09
REV:0

RATING AND CHARACTERISTICS CURVES (HFM1600)

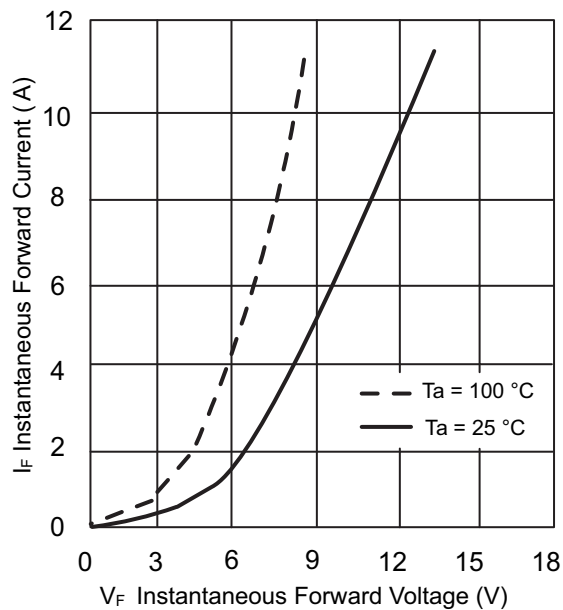


FIG 1: TYPICAL FORWARD CHARACTERISTIC

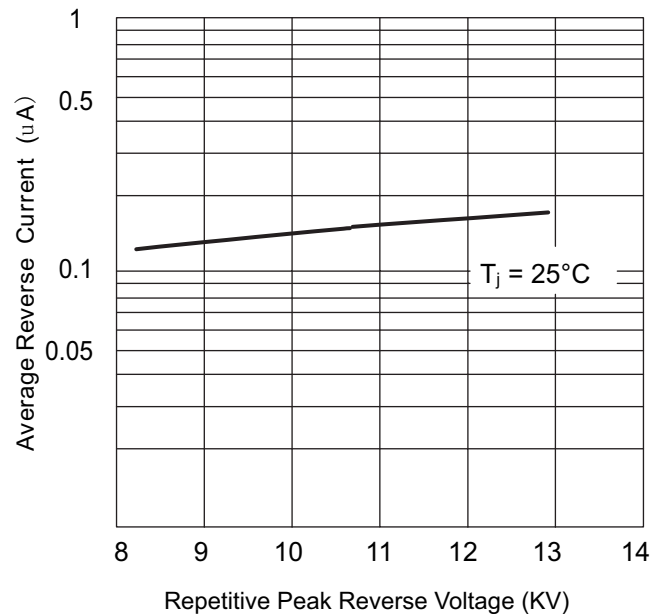


FIG 2: REVERSE CHARACTERISTIC [VR-IR]

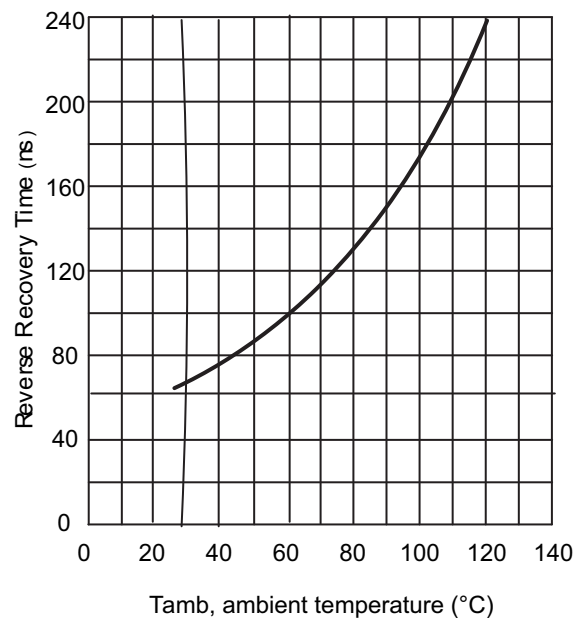


FIG 3: REVERSE RECOVERY TIME CHARACTERISTIC [Ta-Trr]

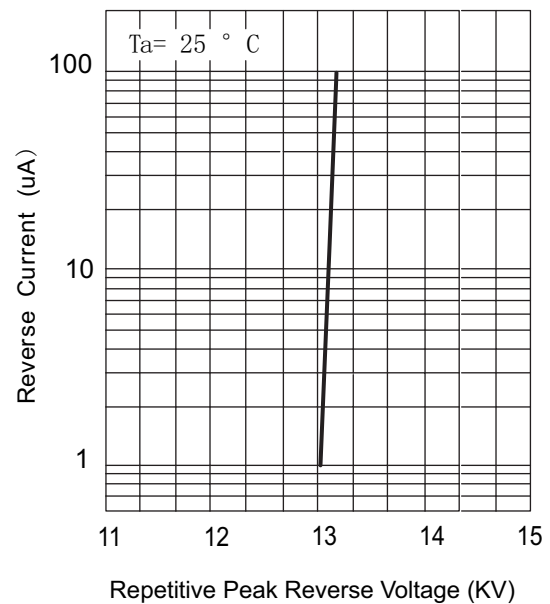


FIG 4: REVERSE CHARACTERISTIC [Vz-Iz]

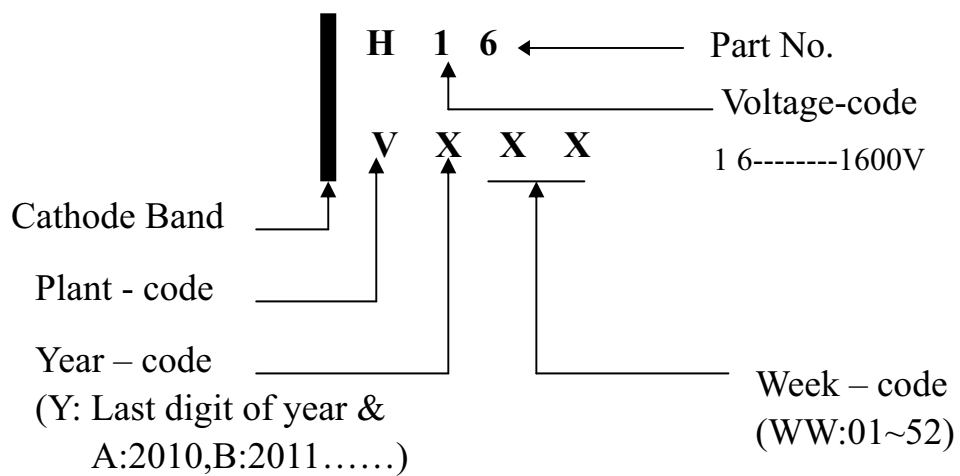


Attachment information about HFM1600

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

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