

# HFR125 - HFR130

PRV : 2500 - 3000 Volts

Io : 250 mA.

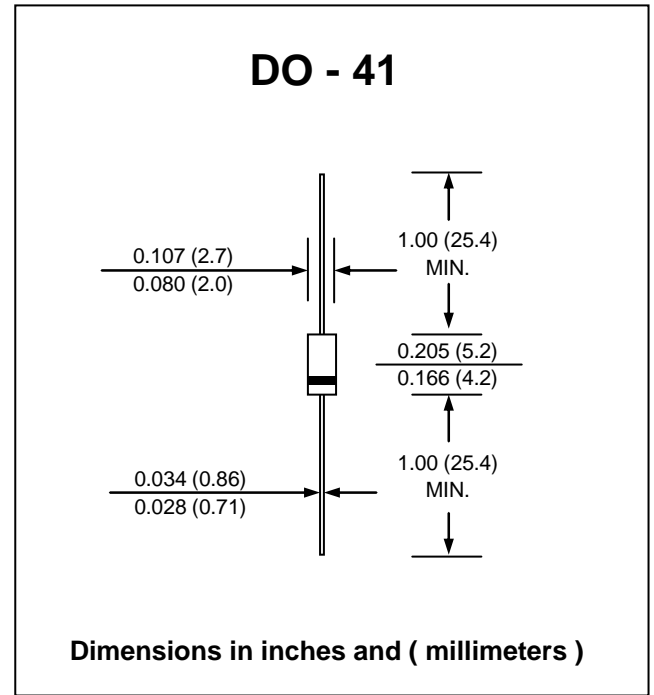
## FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* Pb / RoHS Free

## MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.34 gram

# HIGH VOLTAGE FAST RECOVERY RECTIFIERS



## 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%

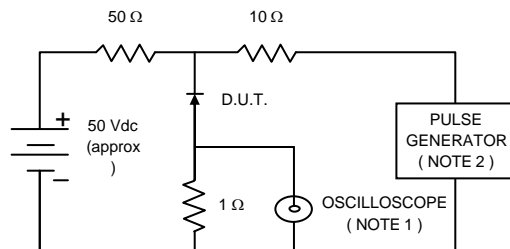
RATING	SYMBOL	HFR125	HFR130	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	2500	3000	V
Maximum RMS Voltage	VRMS	1750	2100	V
Maximum DC Blocking Voltage	VDC	2500	3000	V
Maximum Average Forward Current Ta = 50°C	IF(AV)	250		mA
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30		A
Maximum Peak Forward Voltage at IFM = 250 mA.	VF	5.0	7.0	V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	IR	1.0		µA
	IR(H)	20		µA
Maximum Reverse Recovery Time ( Note 1 )	Trr	250		ns
Junction Temperature Range	TJ	- 40 to + 150		°C
Storage Temperature Range	TSTG	- 40 to + 150		°C

### Notes :

( 1 ) Reverse Recovery Test Conditions IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

## RATING AND CHARACTERISTIC CURVES ( HFR125 - HFR130 )

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



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.  
2. Rise time = 10 ns max., Source Impedance = 50 ohms.  
3. All Resistors = Non-inductive Types.

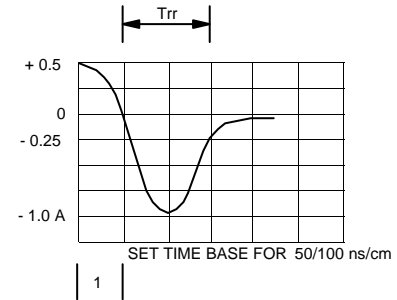


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

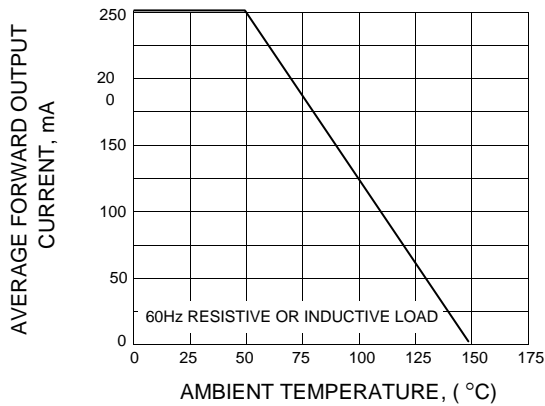


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

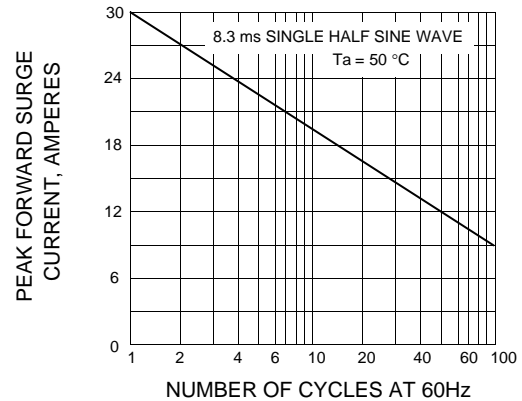


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

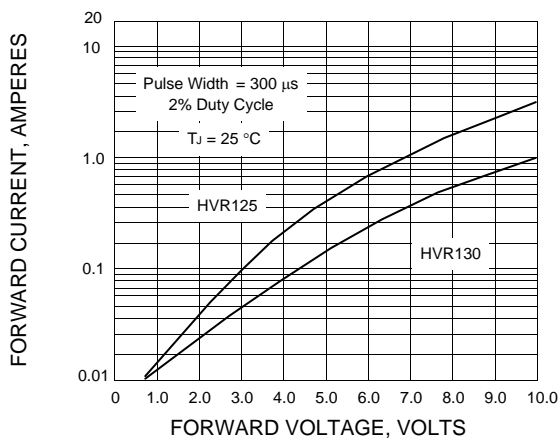


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

