

# HFR125 - HFR130

**PRV : 2500 - 3000 Volts**

**Io : 250 mA.**

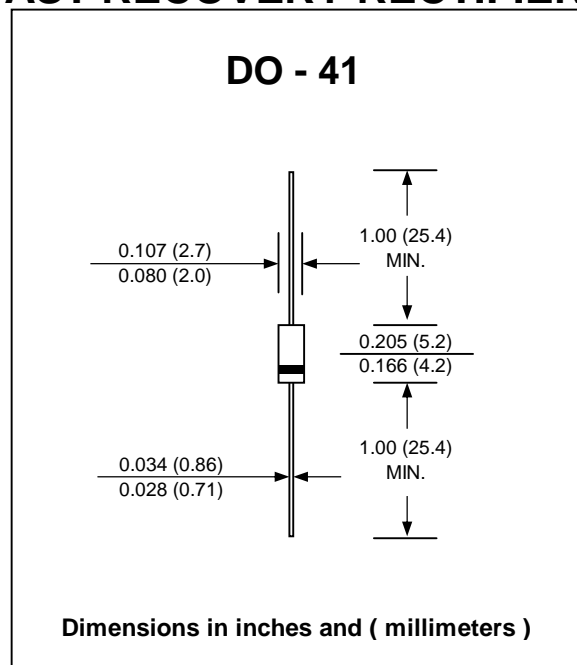
## FEATURES :

- \* 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%.

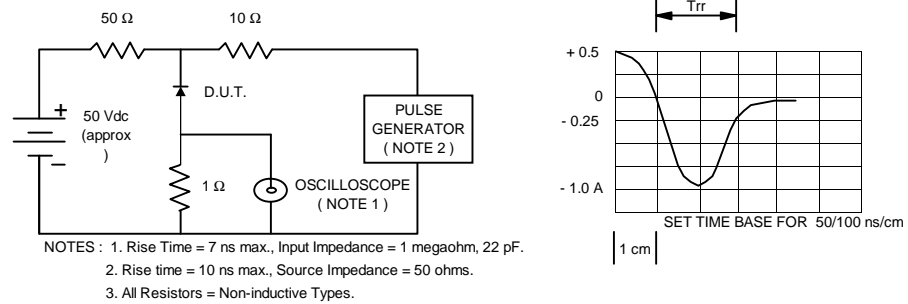
RATING	SYMBOL	HFR125	HFR130	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	2500	3000	V
Maximum RMS Voltage	V <sub>RMS</sub>	1750	2100	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	2500	3000	V
Maximum Average Forward Current Ta = 50°C	I <sub>F(AV)</sub>	250		mA
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30		A
Maximum Peak Forward Voltage at I <sub>FM</sub> = 250 mA.	V <sub>F</sub>	5.0	7.0	V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	I <sub>R</sub>	1.0		μA
	I <sub>R(H)</sub>	20		μA
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	250	200	ns
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150		°C

### Note :

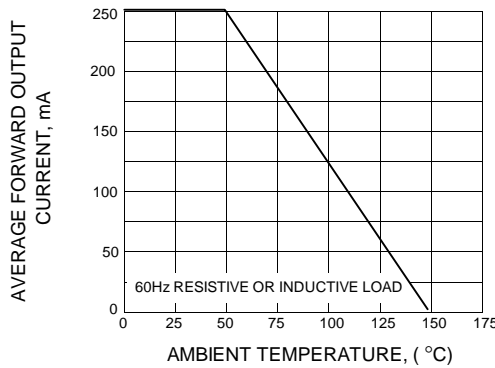
( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.

## RATING AND CHARACTERISTIC CURVES ( HFR125 - HFR130 )

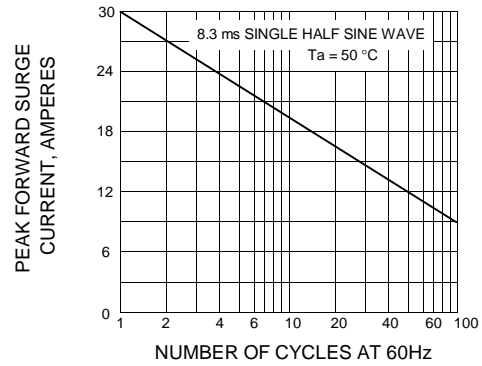
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



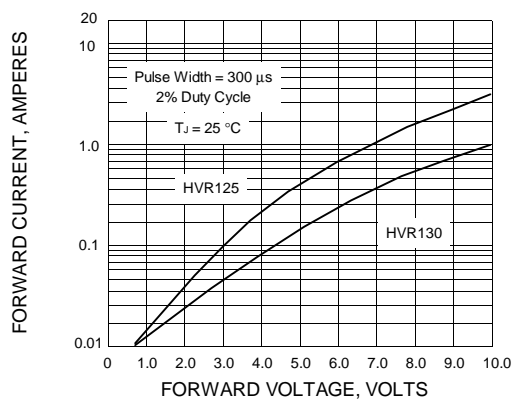
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

