

HFR125 - HFR130

PRV : 2500 - 3000 Volts

Io : 250 mA.

FEATURES :

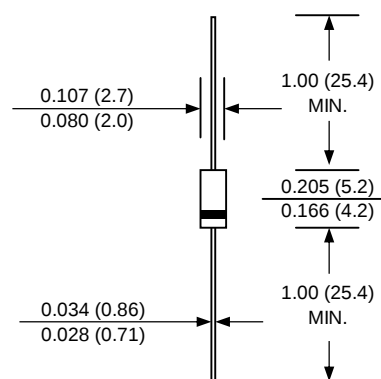
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

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

DO - 41



Dimensions in inches and (millimeters)

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

Note :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

RATING AND CHARACTERISTIC CURVES (HFR125 - HFR130)

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

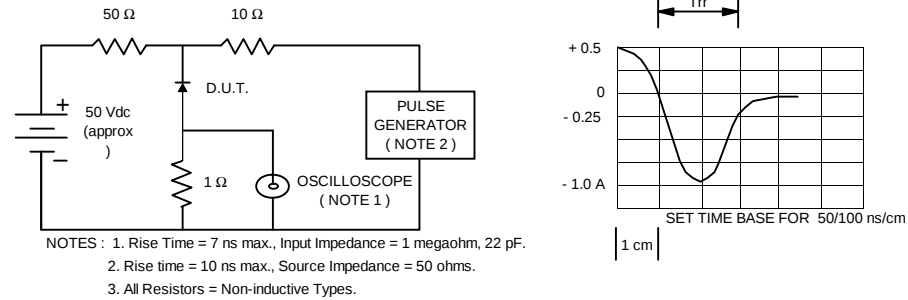


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

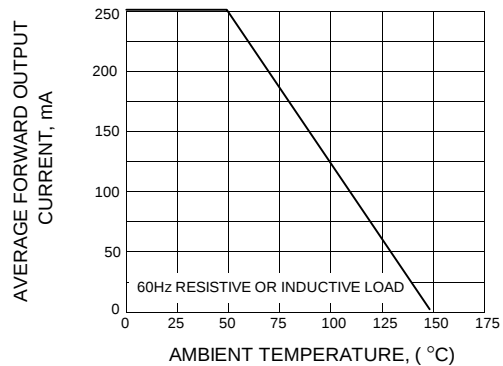


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

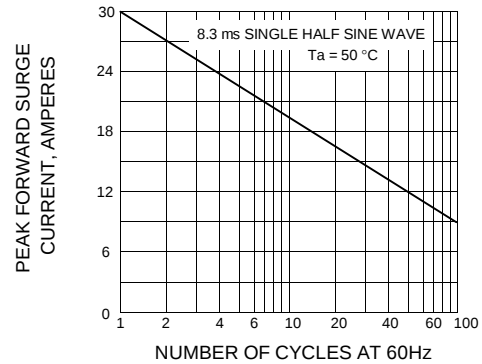


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

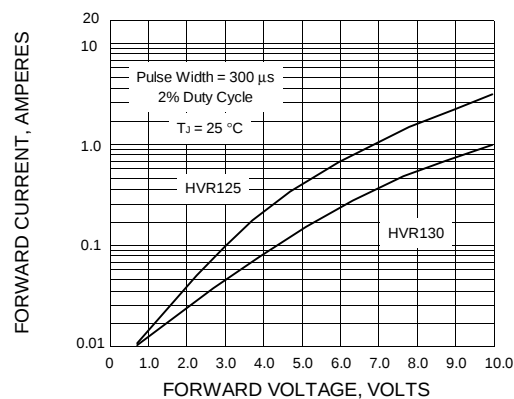


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

