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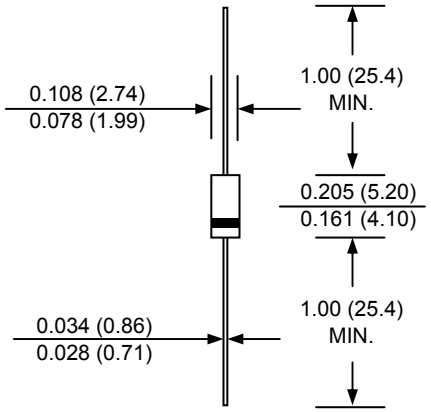
HFR180

GLASS PASSIVATED HIGH VOLTAGE FAST RECOVERY RECTIFIER

PRV : 8000 Volts
Io : 0.3 Ampere

DO - 41



Dimensions in inches and (millimeters)

FEATURES :

* Glass pasivated junction chip
* High surge current capability
* High voltage capability
* High reliability
* Low reverse current
* 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

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	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	8000	V
Maximum RMS Voltage	V_{RMS}	5600	V
Maximum DC Blocking Voltage	V_{DC}	8000	V
Maximum Average Forward Current at Ta = 50 °C	$I_{F(AV)}$	300	mA
Maximum Peak Forward Surge Current , 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	40	A
Maximum Peak Forward Voltage at I_F = 300 mA	V_F	9.0	V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0	µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50	µA
Maximum Reverse Recovery Time (Note 1)	Trr	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, Irr = 0.25 A.

RATING AND CHARACTERISTIC CURVES (HFR180)

FIG.1 - DERATING CURVE RECTIFIED CURRENT

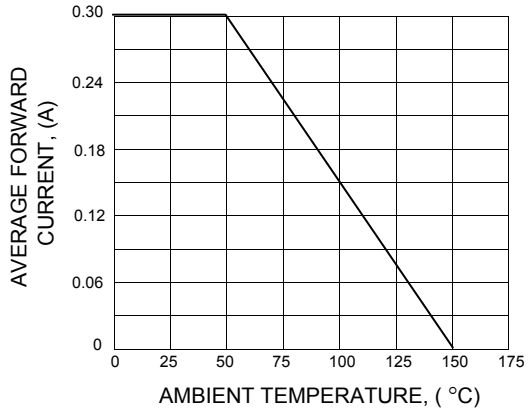


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

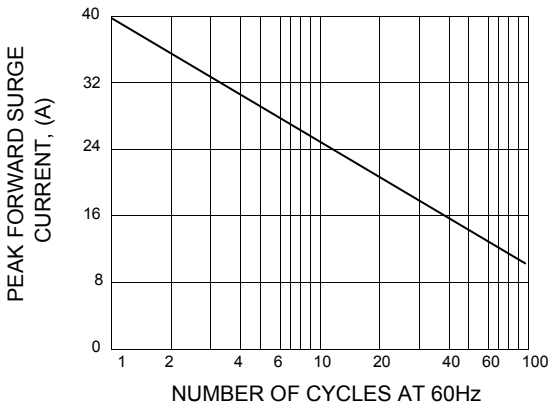


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

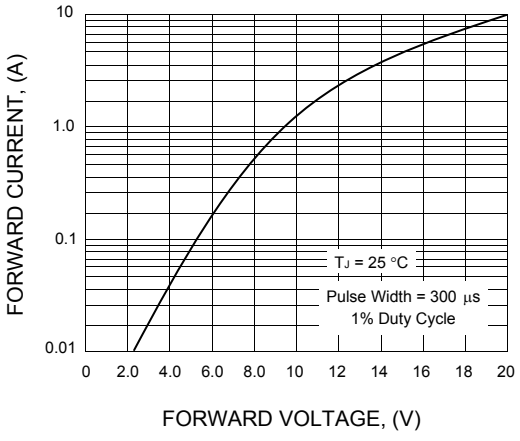


FIG.4 - TYPICAL REVERSE CHARACTERISTICS