



Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	60	A
V_{RRM}	300	V
$V_F@30A, T_j=125^\circ C$	0.78	V, typ
T_j (operating/storage)	-65 to 175	$^\circ C$

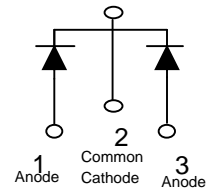
Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications

MECHANICAL:

* Molded Plastic TO-247 package

ELECTRICAL:

- * Low Forward Voltage Drop
- * Reliable High Temperature Operation
- * Softest, fast switching capability
- * 175 $^\circ C$ Operating Junction Temperature
- * Lead Free Finish, RoHS Compliant



Maximum Ratings and Electrical Characteristics

(at 25 $^\circ C$ unless otherwise specified)

	SYMBOL			UNITS
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Reverse Voltage	V_{RM} V_{RWM} V_{RRM}	300		Volts
Average Rectified Forward Current (Rated V_R -20Khz Square Wave) - 50% duty cycle	I_O	60		Amps
Peak Forward Surge Current - 1/2 60hz	I_{FSM}	250		Amps
Instantaneous Forward Voltage (per leg) $I_F = 30A; T_j = 25^\circ C$ $I_F = 30A; T_j = 125^\circ C$	V_{F^*}	Typ 0.89 0.78	Max 0.96 0.80	Volts
Maximum Instantaneous Reverse Current at Rated V_{RM} $T_j = 25^\circ C$ $T_j = 125^\circ C$	I_R	Typ 0.01 1.0	Max 0.1 10	mA
Maximum Rate of Voltage Change (at Rated V_R)	dv/dt	10,000		V/uS
Maximum Thermal Resistance JC (per leg) Package = TO-247	$R\theta_{JC}$	2		$^\circ C/W$
Operating and Storage Junction Temperature	T_j	-65 to +175		$^\circ C$

* Pulse width < 300 uS, Duty cycle < 2%

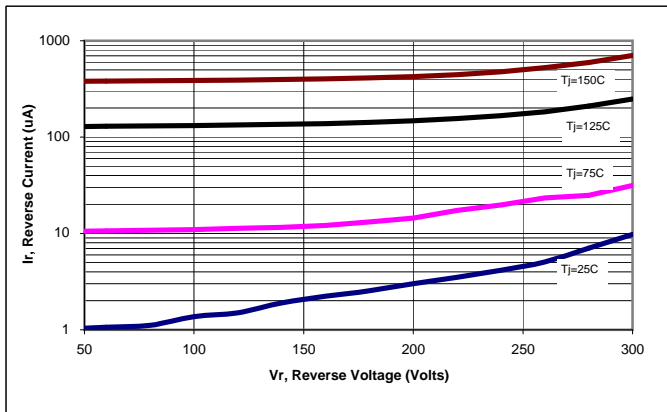


Figure 1: Typical Reverse Current

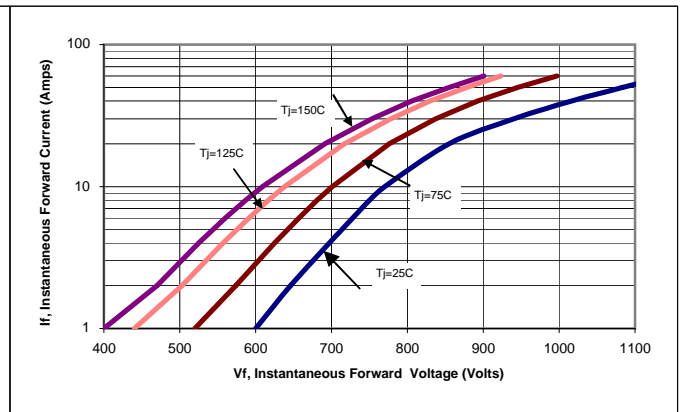


Figure 2: Typical Forward Voltage

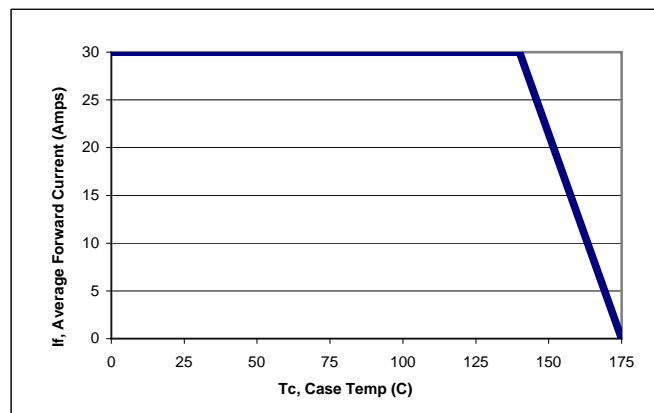


Figure 3: Current Derating, Case (per leg)

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