

Power Schottky Rectifier - 30Amp 100Volt

Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency

Application

- AC/DC Switching Adaptor and other Switching Power Supply

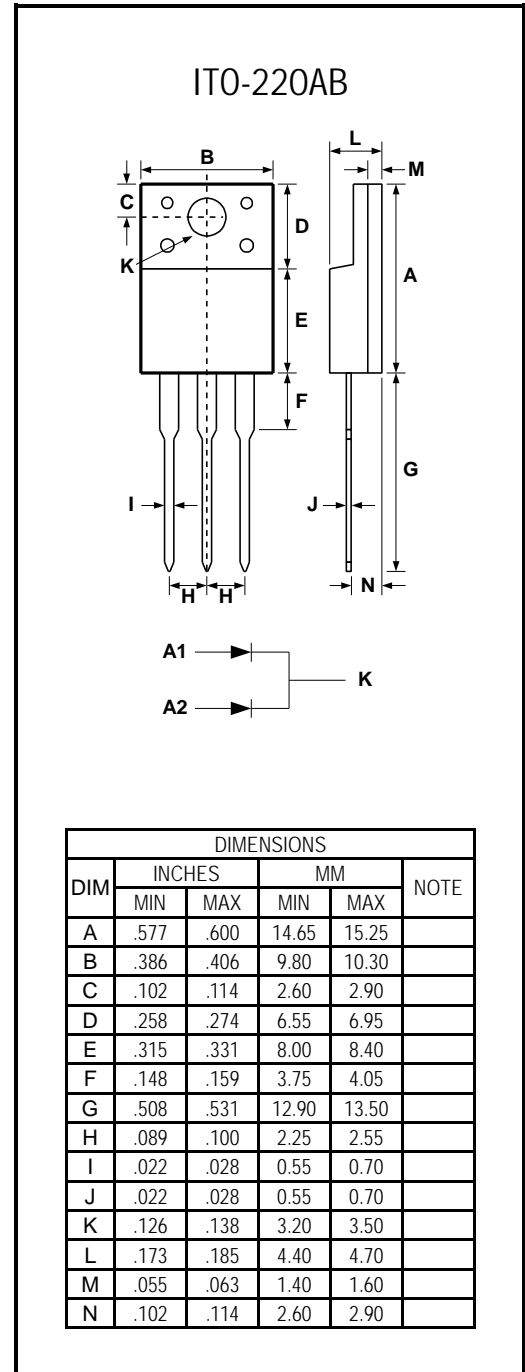
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I <sub>F(AV)</sub>	30	A	At T <sub>c</sub> =125°C
V <sub>RRM</sub>	100	V	Maximum repetitive peak reverse voltage
I <sub>FSM</sub>	250	A	8.3ms single half sine-wave single shot
V <sub>F(max)</sub>	0.85	V	At I <sub>F</sub> =15A, T <sub>c</sub> =25°C
T <sub>j</sub>	-50 to +175	°C	
T <sub>stg</sub>	-50 to +150	°C	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.85V	T <sub>c</sub> =25°C
Forward Voltage		0.75V	T <sub>c</sub> =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	50μA	T <sub>c</sub> =25°C
		10mA	T <sub>c</sub> =125°C
Voltage Rate of Change	dv/dt	10,000 V/μs	Rated V <sub>R</sub>
Typical Thermal Resistance, Junction to Case	R <sub>th(j-c)</sub>	4.5 °C/W	Per diode

Note: (1)Pulse Test : 380μs pulse width, 2% duty cycle



April 2004

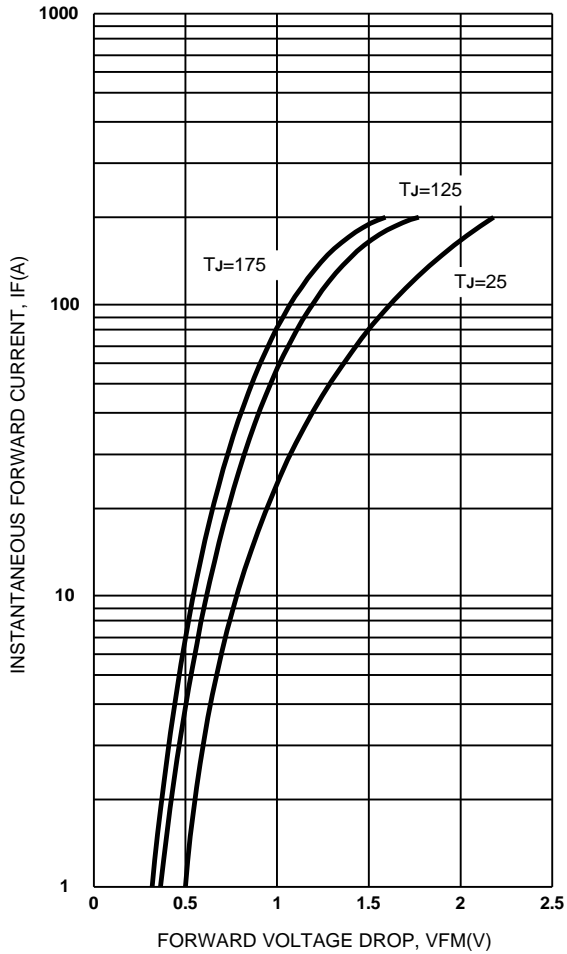


Figure 1. Max. Forward Voltage Drop Characteristics (Per Leg)

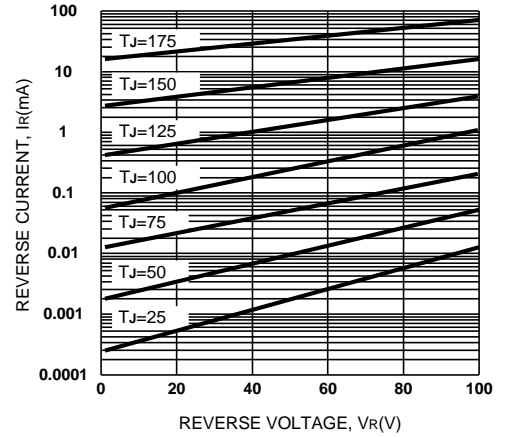


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (Per Leg)

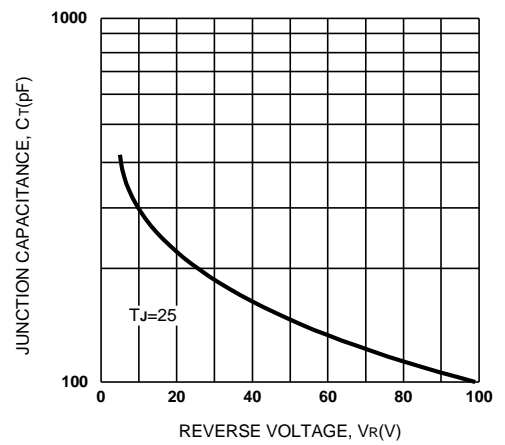


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (Per Leg)

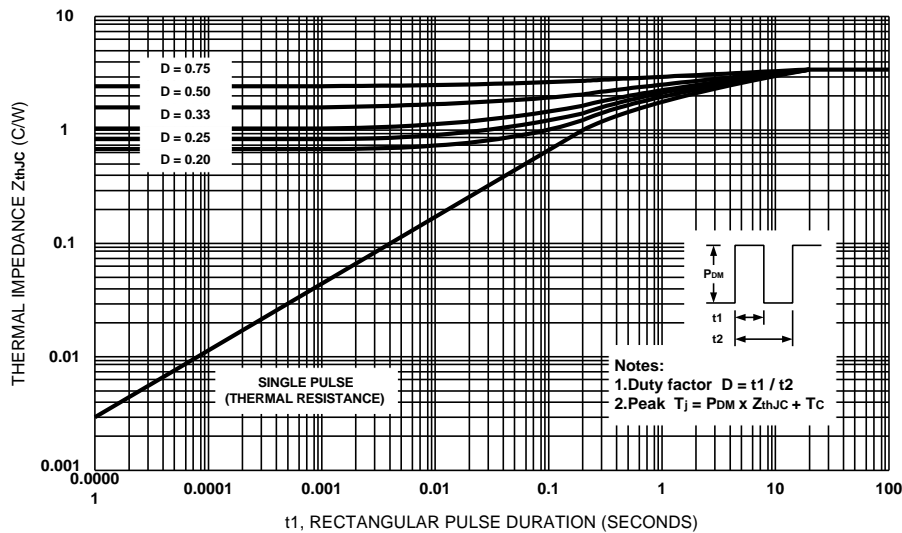


Figure 4. Max. Thermal Impedance  $Z_{thJC}$  Characteristics (Per Leg)

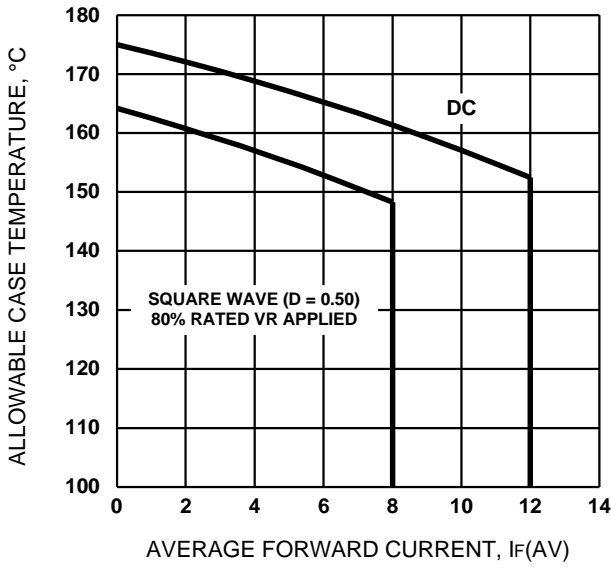


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (Per Leg)

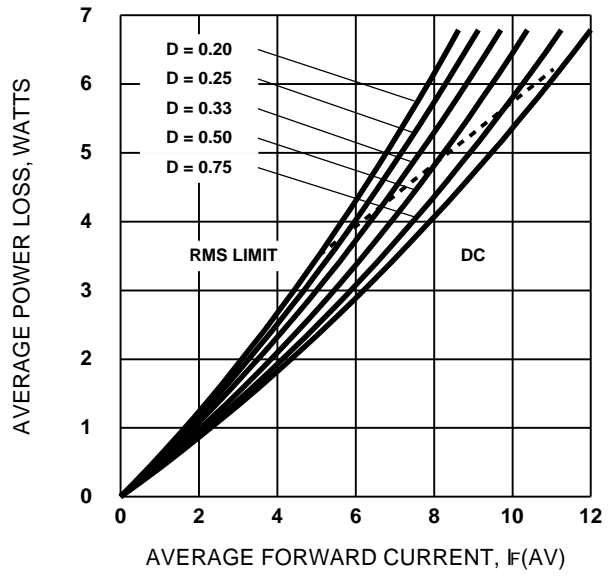


Figure 6. Forward Power Loss Characteristics (Per Leg)