

Power Schottky Rectifier - 40Amp 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
- ESD performance human body mode > 8 KV

Application

- AC/DC Switching Adaptor and TFT-LCD Power Supply
- SMPS

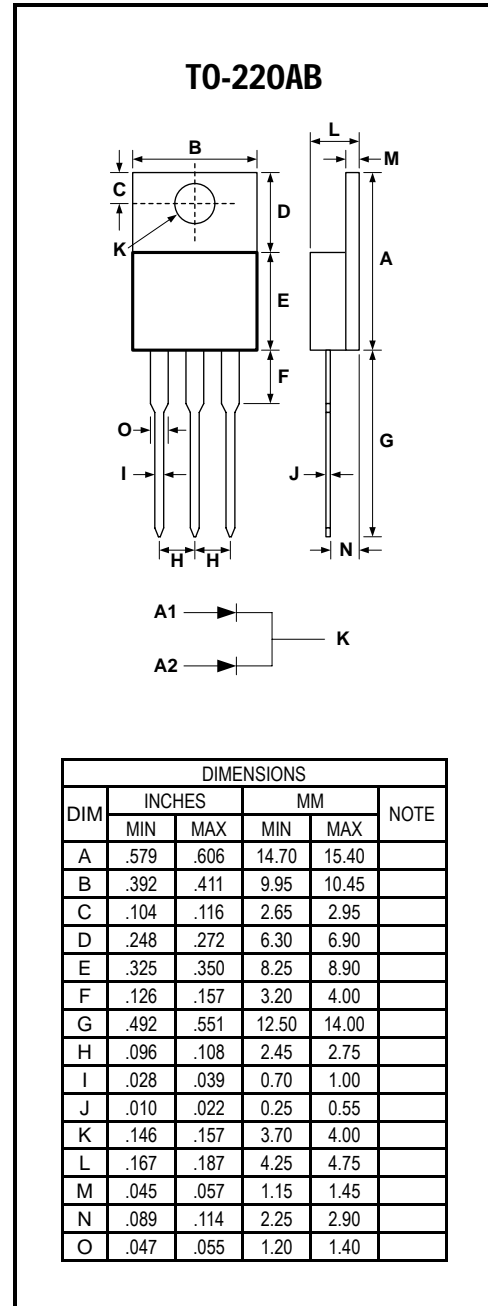
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	40	A	Average Forward Current
VRRM	100	V	Repetitive Peak Reverse Voltage
IFSM	400	A	Peak Forward Surge Current
VF(max)	0.66	V	Forward Voltage Drop
Tj	-50 to +175	°C	Operating Temperature
Tstg	-50 to +150	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	VF	0.82V	Tc = 25°C
		0.66V	Tc = 125°C
Maximum Reverse Leakage Current	IR	0.01mA	Tc = 25°C
		10mA	Tc = 125°C
Maximum Voltage Rate of Change	dv/dt	10,000 V/μs	Rated VR
Typical Thermal Resistance, Junction to Case	Rθ(j-c)	2.2 °C/W	Per diode

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



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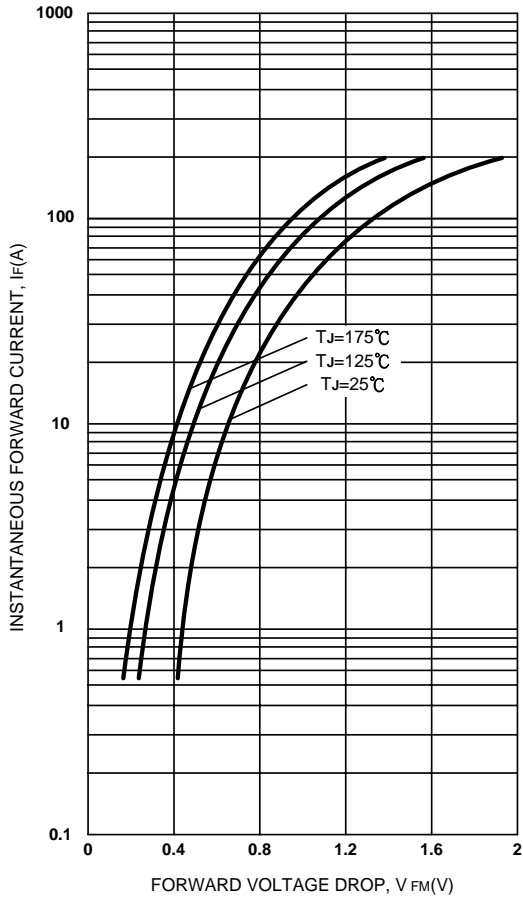


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

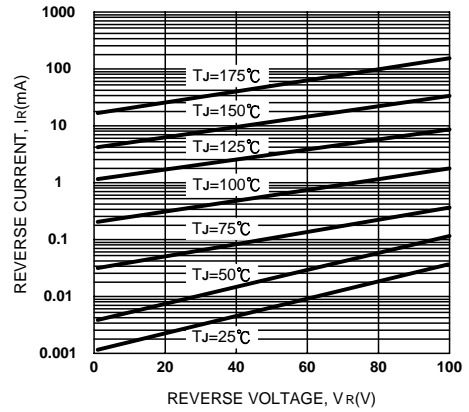


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

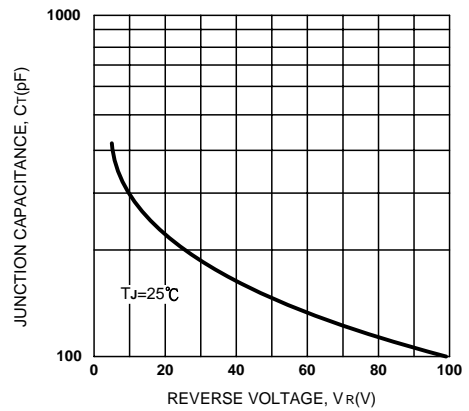


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

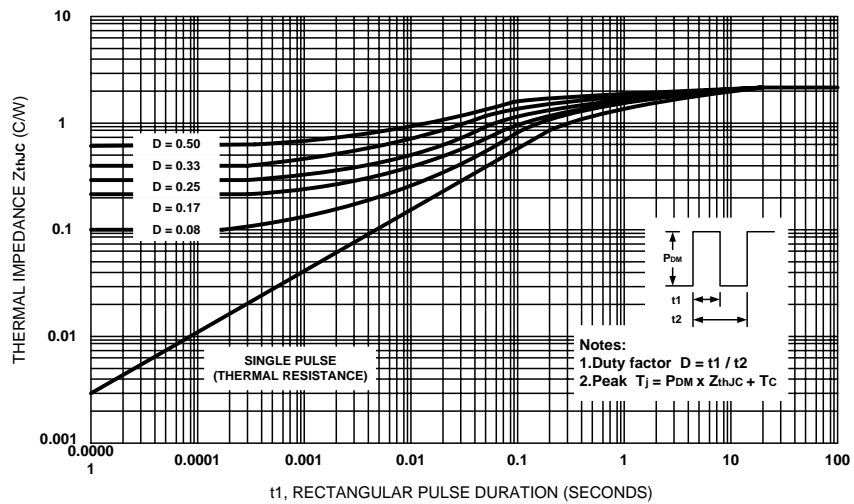


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

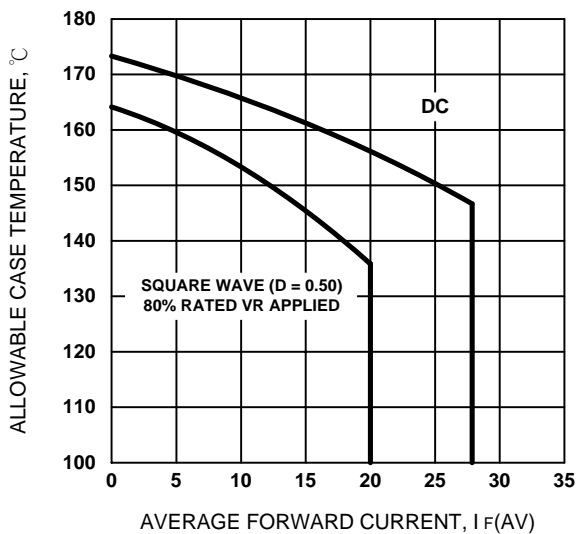


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (Per Leg)

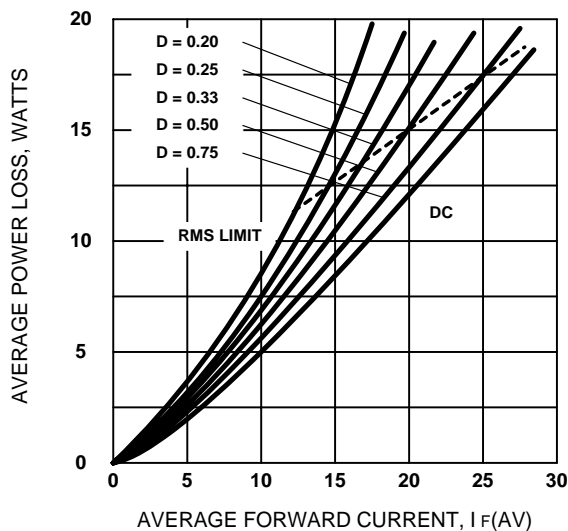


Figure 6. Forward Power Loss Characteristics (Per Leg)

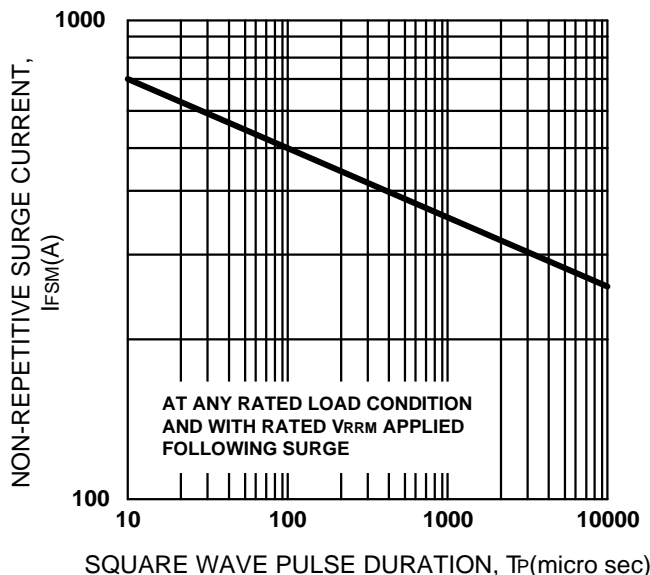


Figure 7. Max. Non-Repetitive Surge Current (Per Leg)