

Power Schottky Rectifier - 40Amp 30Volt

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

- Switching-Mode Power Supply
- Solar-System Control Box

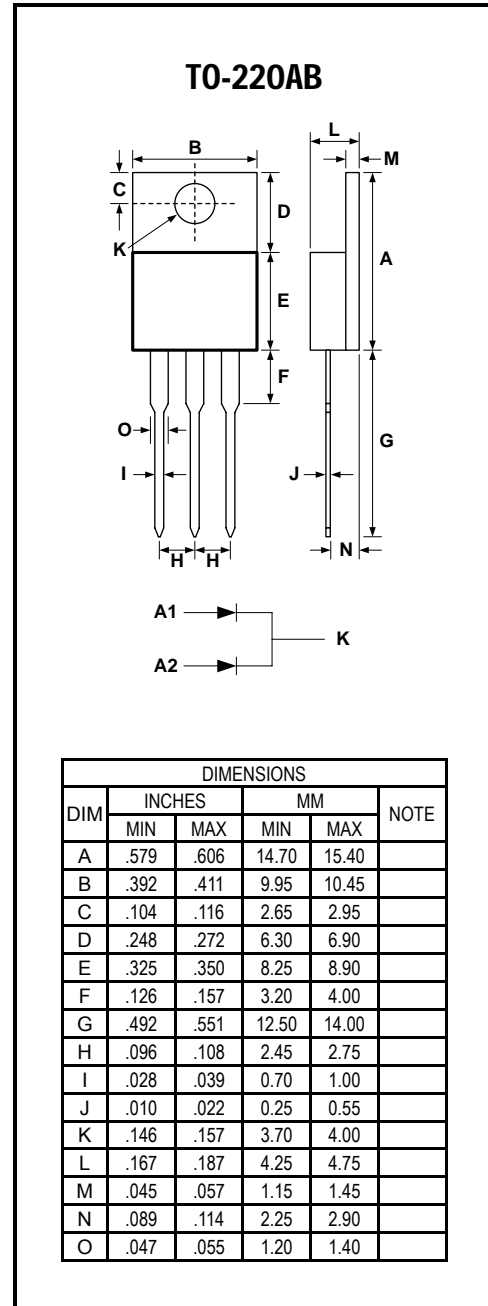
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	40	A	Average Forward Current
VRRM	30	V	Repetitive Peak Reverse Voltage
IFSM	400	A	Peak Forward Surge Current
VF(max)	0.35	V	Forward Voltage Drop
Tj	-50 to +150	°C	Operating Temperature
Tstg	-50 to +125	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	VF	0.48V 0.35V	Tc = 25°C Tc = 125°C
Maximum Reverse Leakage Current	IR	1.0mA	Tc = 25°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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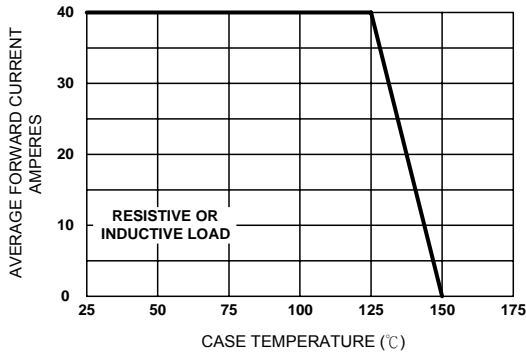


Figure 1. Forward Current Derating Curve

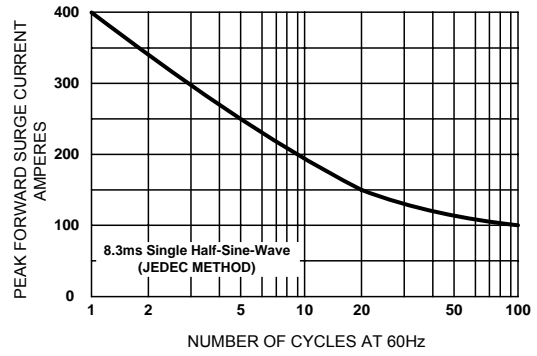


Figure 2. Maximum Non-repetitive Surge Current

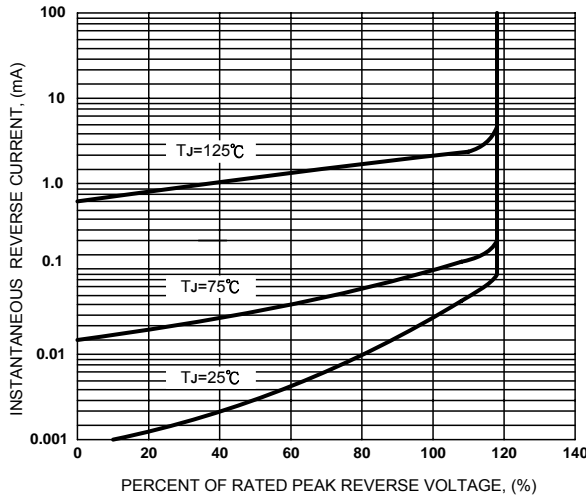


Figure 3. Typical Reverse Characteristics

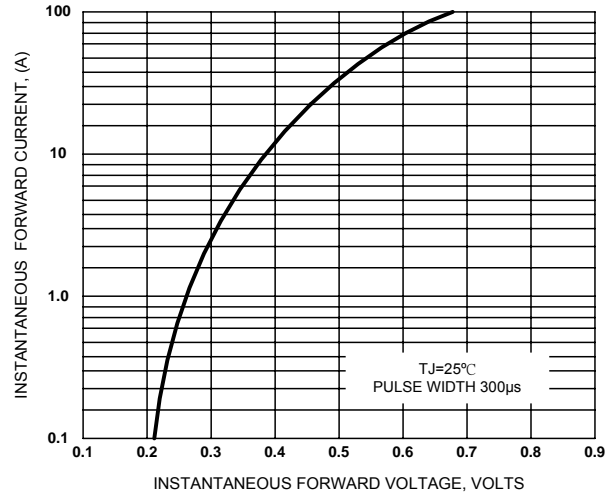


Figure 4. Typical Forward Characteristics

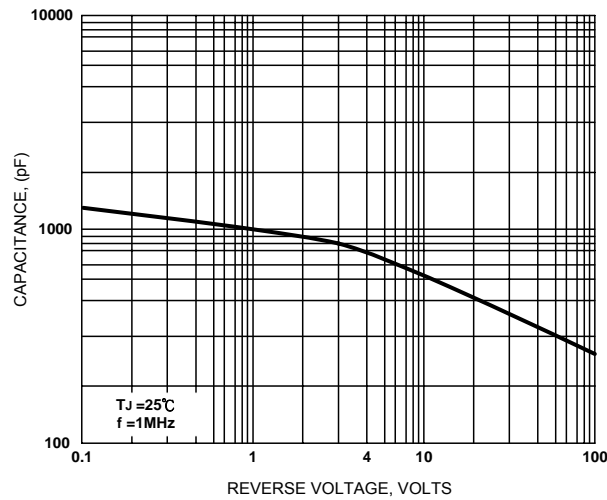


Figure 5. Typical Junction Capacitance