

Power Schottky Rectifier - 30Amp 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

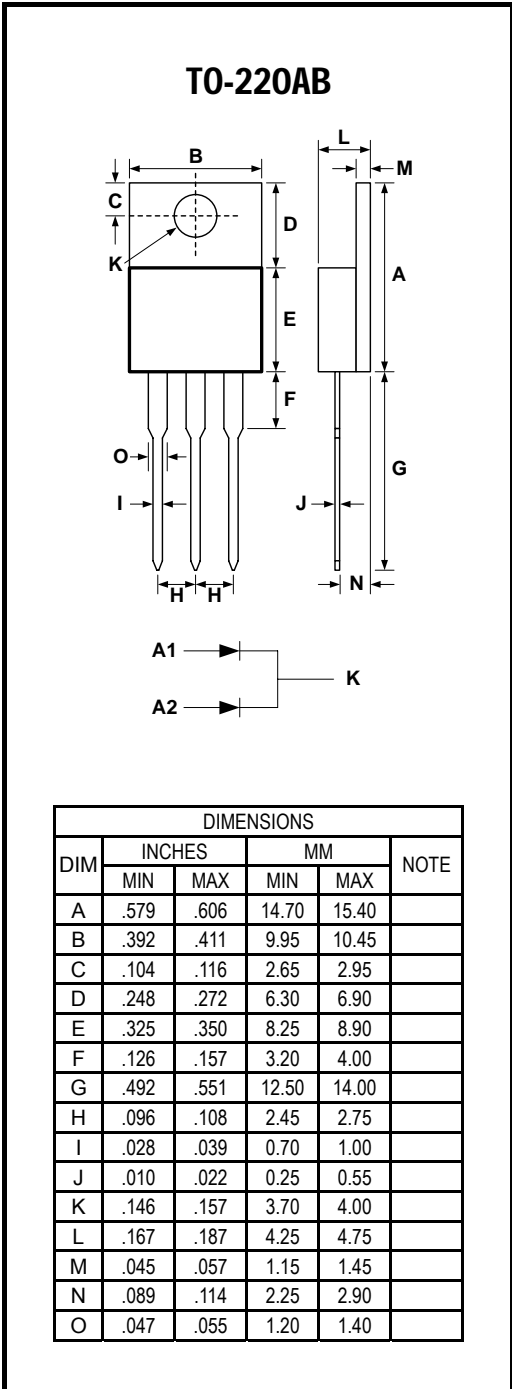
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	30	A	Average Forward Current
VRRM	30	V	Repetitive Peak Reverse Voltage
IFSM	350	A	Peak Forward Surge Current
VF(max)	0.32	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	0.45V	Tc = 25°C
		0.32V	Tc = 125°C
Maximum Reverse Leakage Current	IR	1.0mA	Tc = 25°C
Peak Repetitive Reverse Current	I _{RRM}	1.0A	tp = 2µs square F = 1kHz
Non Repetitive Peak Reverse Current	I _{RSM}	3.0A	tp = 100µs square
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



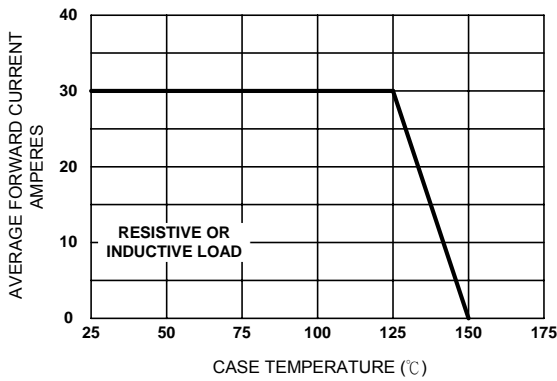


Figure 1. Forward Current Derating Curve

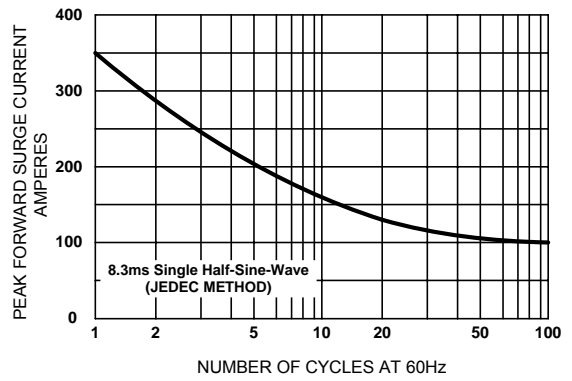


Figure 2. Maximum Non-repetitive Surge Current

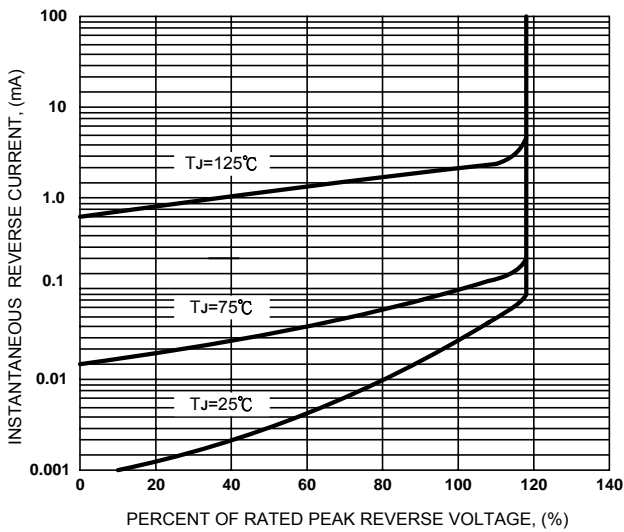


Figure 3. Typical Reverse Characteristics

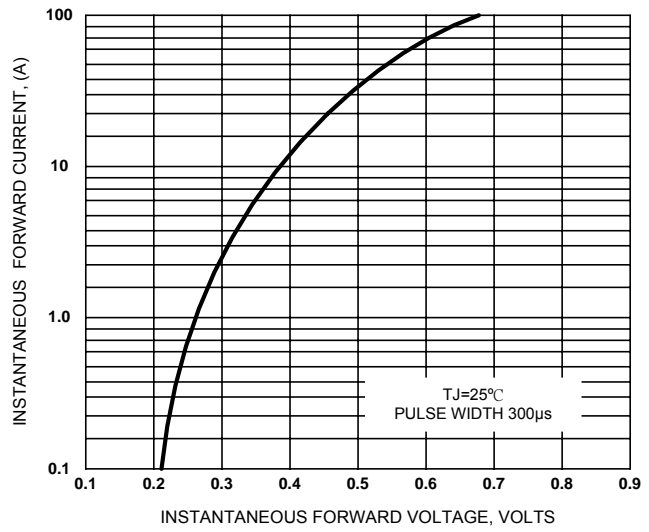


Figure 4. Typical Forward Characteristics

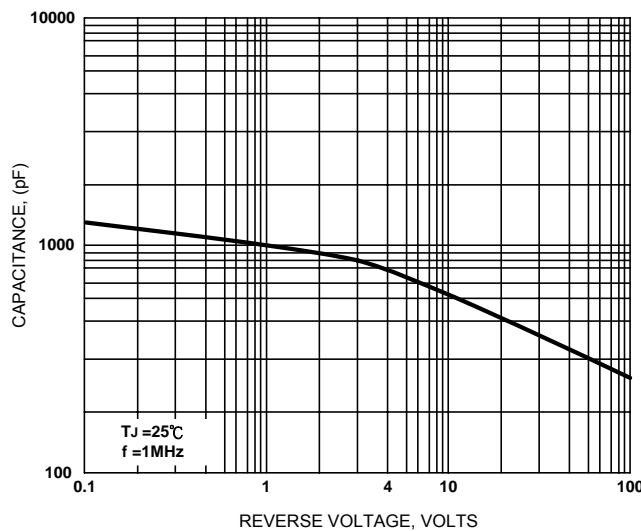


Figure 5. Typical Junction Capacitance