

Power Schottky Rectifier - 20Amp 45Volt

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

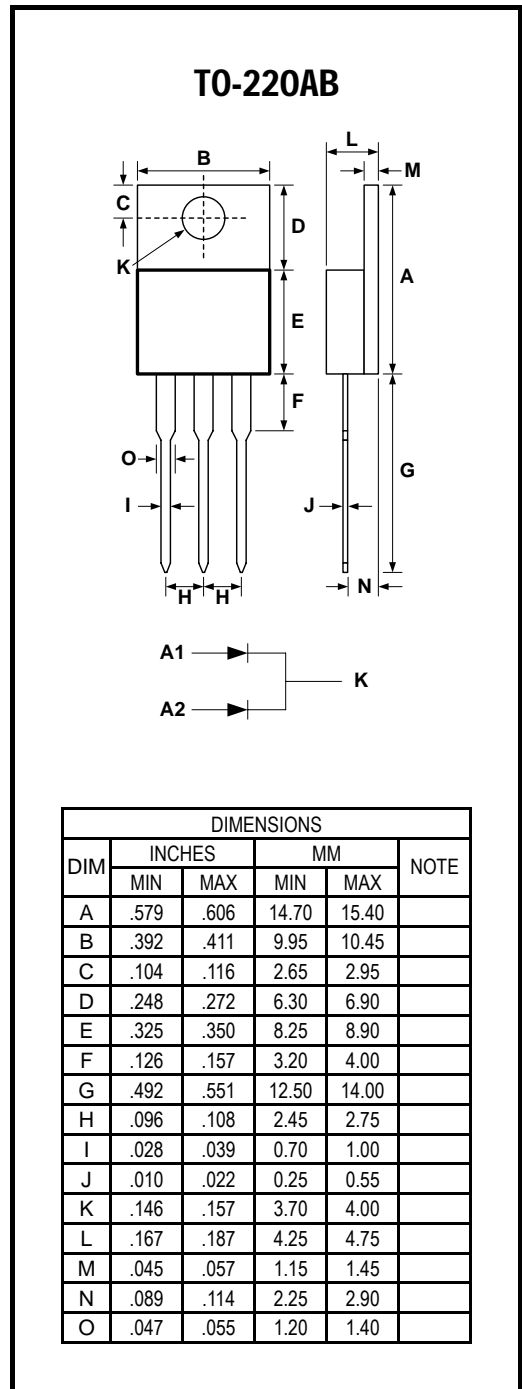
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	20	A	Average Forward Current
VRRM	45	V	Repetitive Peak Reverse Voltage
IFSM	150	A	Peak Forward Surge Current
VF(max)	0.58	V	Forward Voltage Drop
Tj	-50 to +175	°C	Operating Temperature
Tstg	-65 to +150	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	VF	0.70V	Tc = 25°C
Forward Voltage		0.58V	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



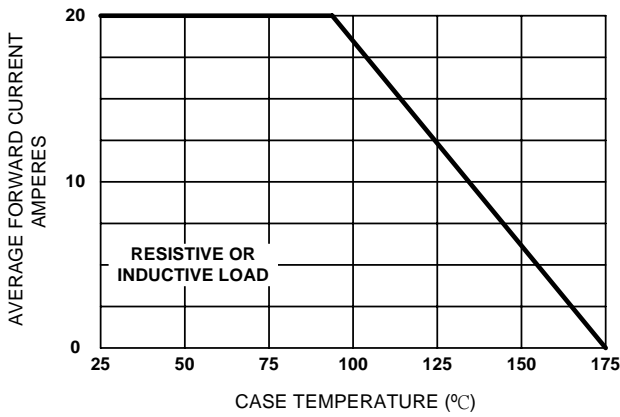


Figure 1. Forward Current Derating Curve

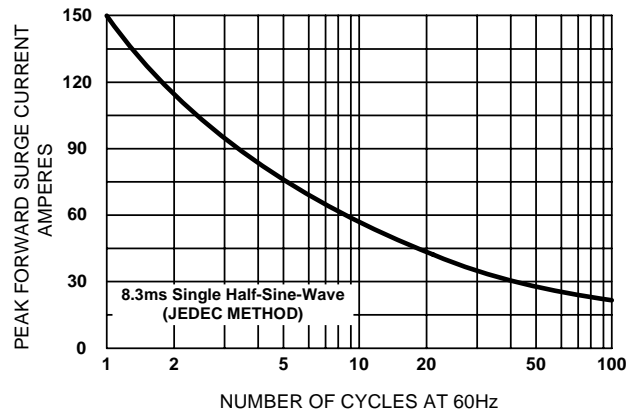


Figure 2. Maximum Non-repetitive Surge Current

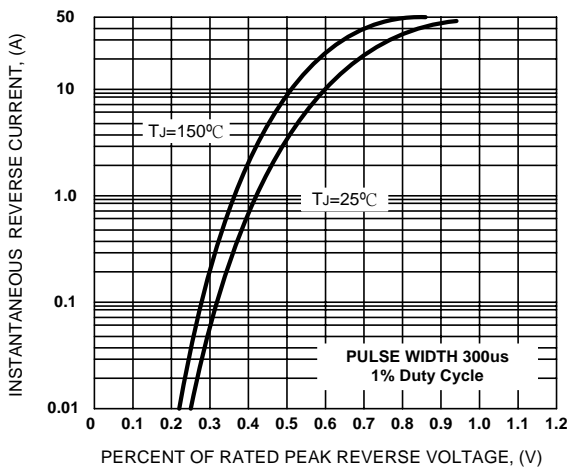


Figure 3. Typical Instantaneous Forward Characteristics

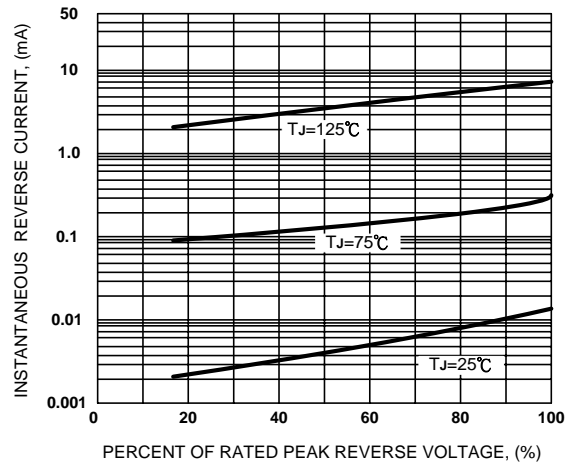


Figure 4. Typical Reverse Characteristics

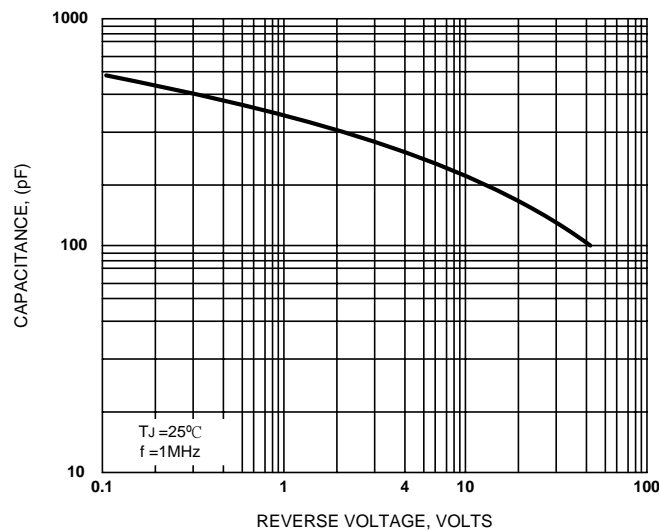


Figure 5. Typical Junction Capacitance