

Power Schottky Rectifier – 60Amp 60Volt

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
- High operation junction temp up to 175°C Excellent EMI performance

Application

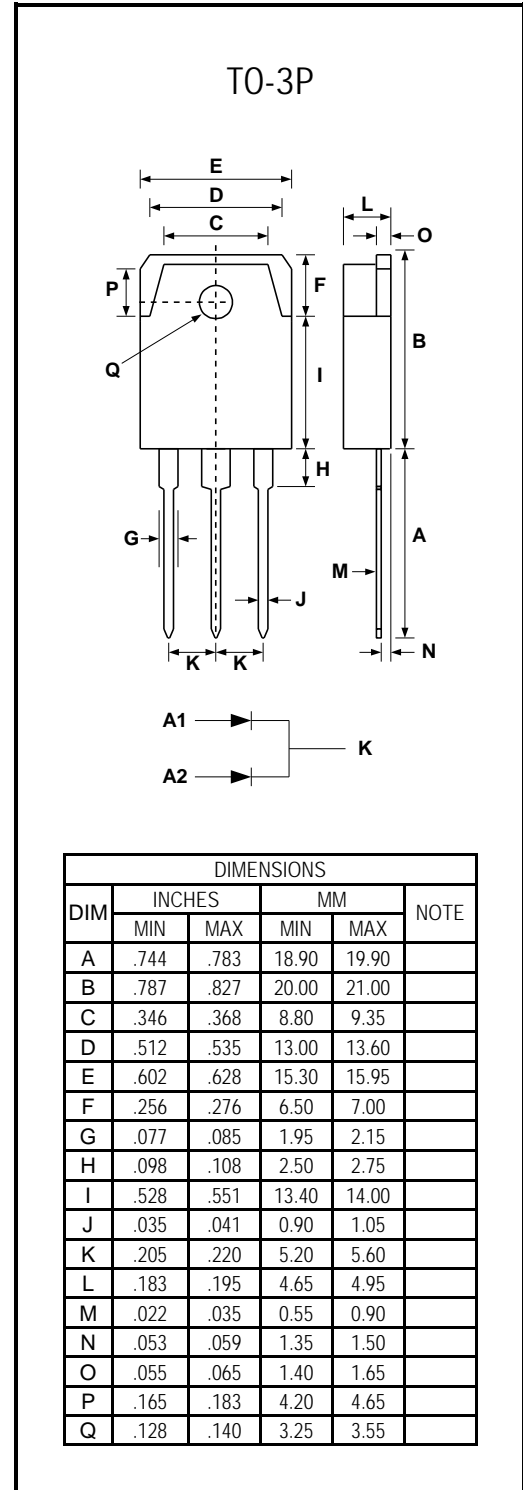
- Switching-Mode Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	60	A	At Tc=125°C
VRRM	60	V	Maximum repetitive peak reverse voltage
IFSM	1000	A	8.3ms single half sine-wave single shot
IRRM	2.0	A	Peak repetitive reverse surge current per leg at tp=2µs,1KHz
VF(max)	0.78 0.60	V	At IF=30A, Tc=25°C At IF=30A, Tc=125°C
Tj	-65 to +175	°C	Operating junction temperature range
Tstg	-65 to +175	°C	Storage temperature range

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	VF	0.78V	Tc=25°C
Forward Voltage		0.60V	Tc=125°C
Maximum Reverse Current At Rated DC Blocking Voltage	IR	0.01mA	Tc=25°C
		8mA	Tc=125°C
Voltage Rate of Change	dv/dt	10,000 V/µs	Rated VR
Typical Thermal Resistance, Junction to Case	Rth (j-c)	1.2 °C/W	Per diode



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

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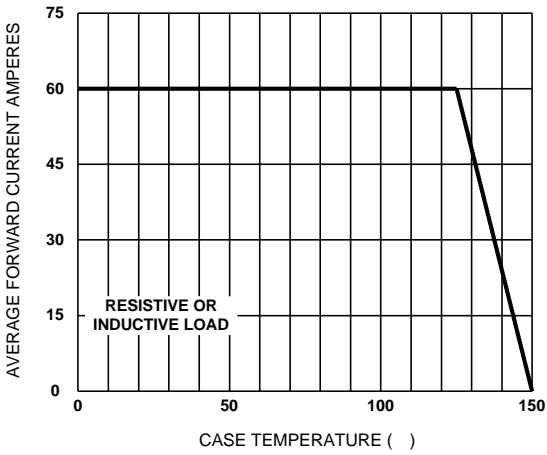


Figure 1. Forward Current Derating Curve

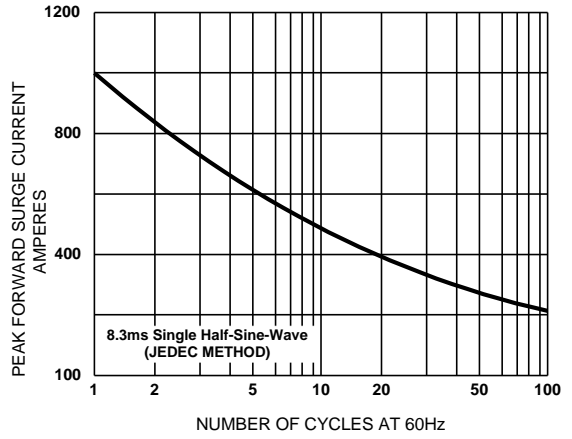


Figure 2. Maximum Non-repetitive Surge Current

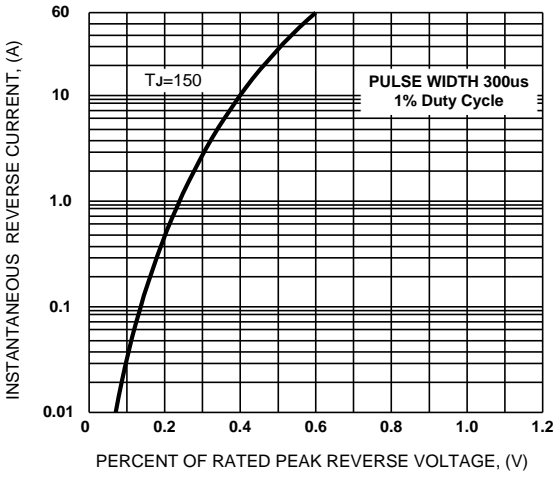


Figure 3. Typical Instantaneous Forward Characteristics

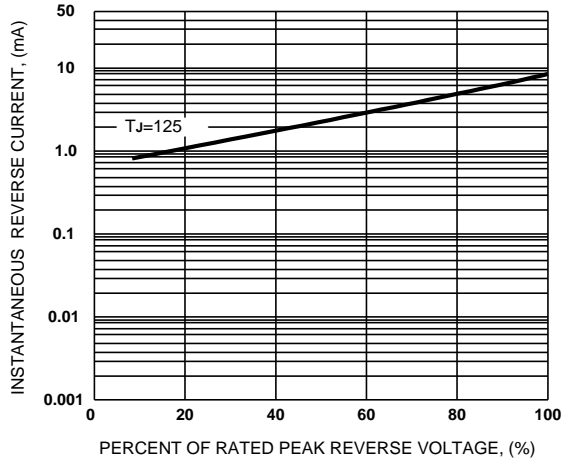


Figure 4. Typical Reverse Characteristics

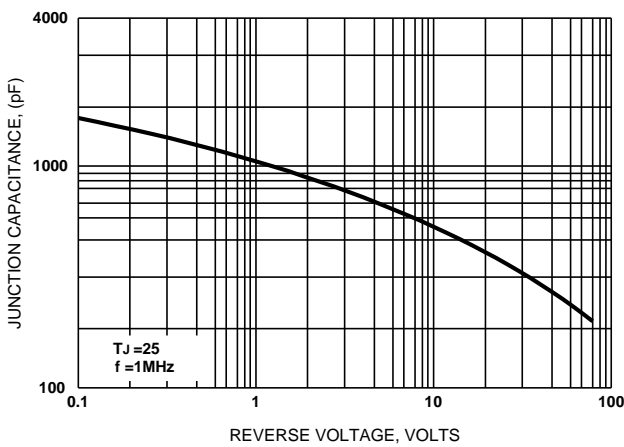


Figure 5. Typical Junction Capacitance

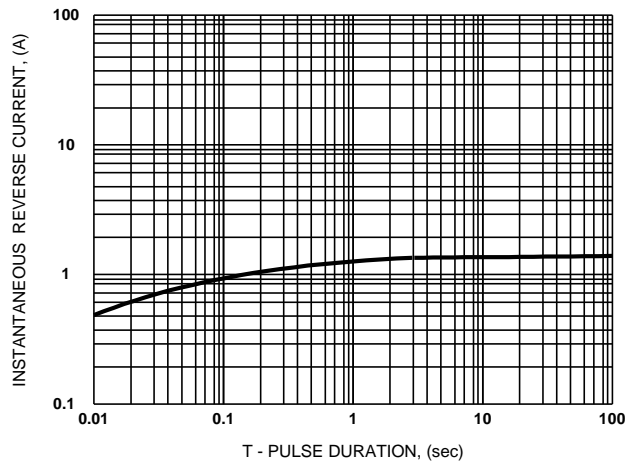


Figure 6. Typical Transient Thermal Impedance