

## 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

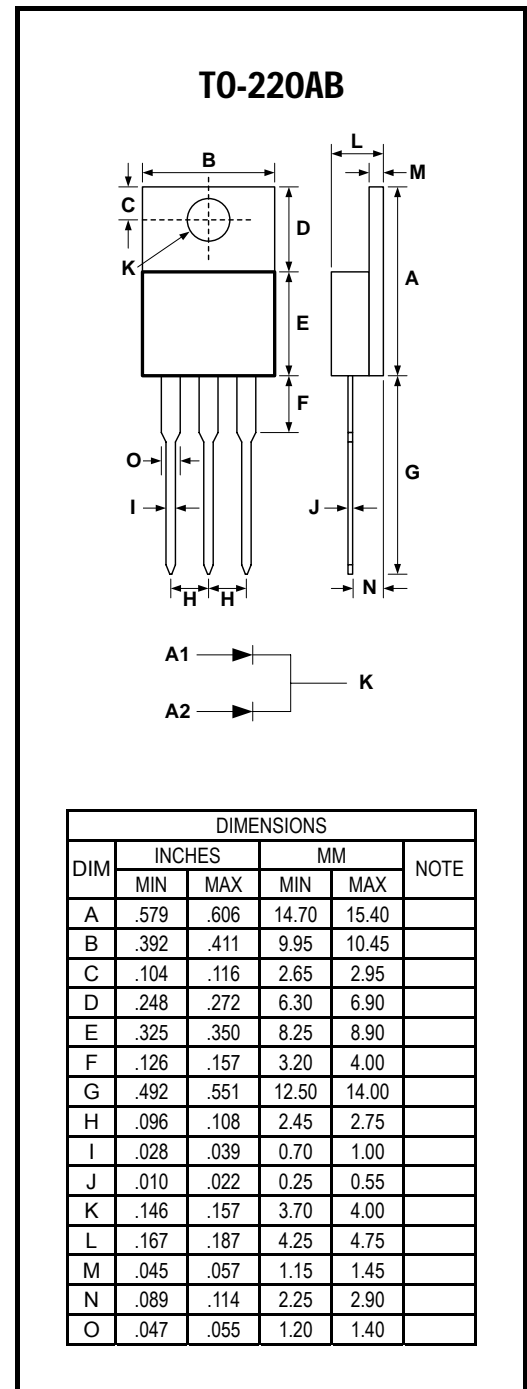
**Absolute maximum ratings**

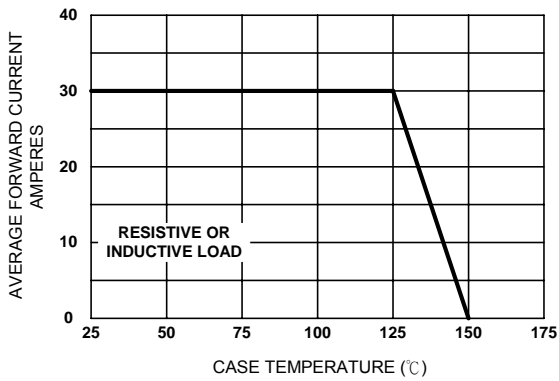
Symbol	Ratings	Unit	Conditions
$I_{F(AV)}$	30	A	Average Forward Current
$V_{RRM}$	30	V	Repetitive Peak Reverse Voltage
$I_{FSM}$	350	A	Peak Forward Surge Current
$V_{F(max)}$	0.35	V	Forward Voltage Drop
$T_j$	-50 to +150	°C	Operating Temperature
$T_{stg}$	-50 to +125	°C	Storage Temperature

**Electrical characteristics**

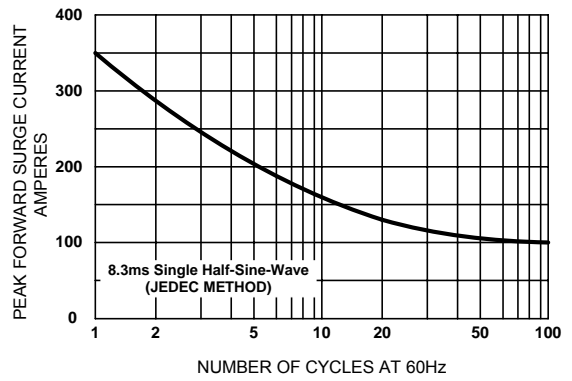
Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	$V_F$	0.48V	$T_c = 25^\circ\text{C}$
		0.35V	$T_c = 125^\circ\text{C}$
Maximum Reverse Leakage Current	$I_R$	1.0mA	$T_c = 25^\circ\text{C}$
Peak Repetitive Reverse Current	$I_{RRM}$	1.0A	$t_p = 2\mu\text{s}$ square $F = 1\text{kHz}$
Non Repetitive Peak Reverse Current	$I_{RSM}$	3.0A	$t_p = 100\mu\text{s}$ square
Maximum Voltage Rate of Change	$dv/dt$	10,000 V/ $\mu\text{s}$	Rated $V_R$
Typical Thermal Resistance, Junction to Case	$R_{\theta(j-c)}$	2.2 °C/W	Per diode

Note: Pulse Test : 380 $\mu\text{s}$  pulse width, 2% duty cycle

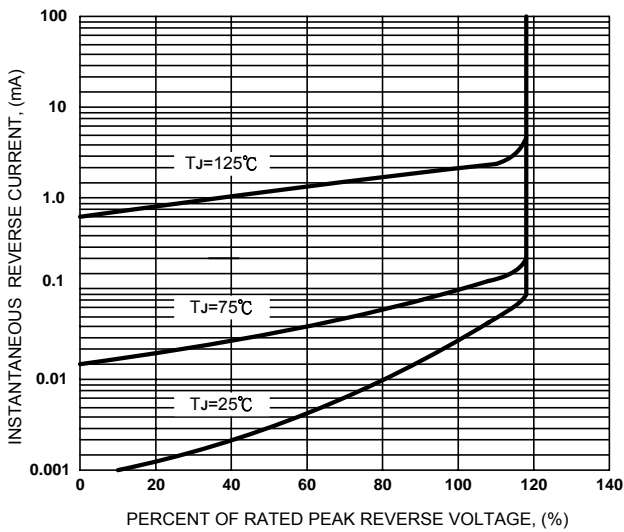




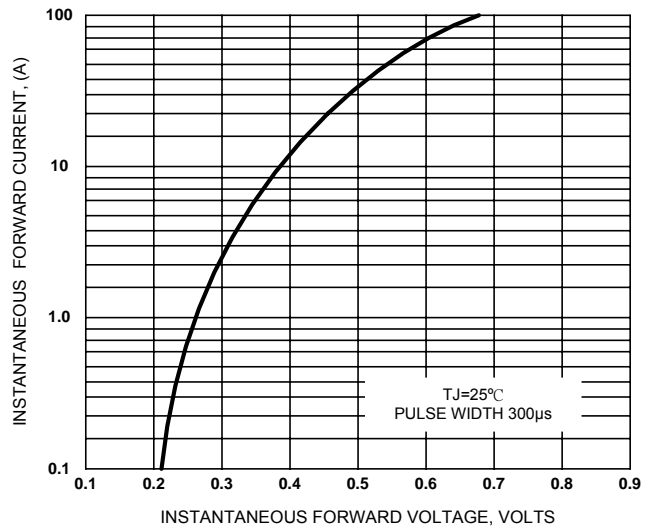
**Figure 1. Forward Current Derating Curve**



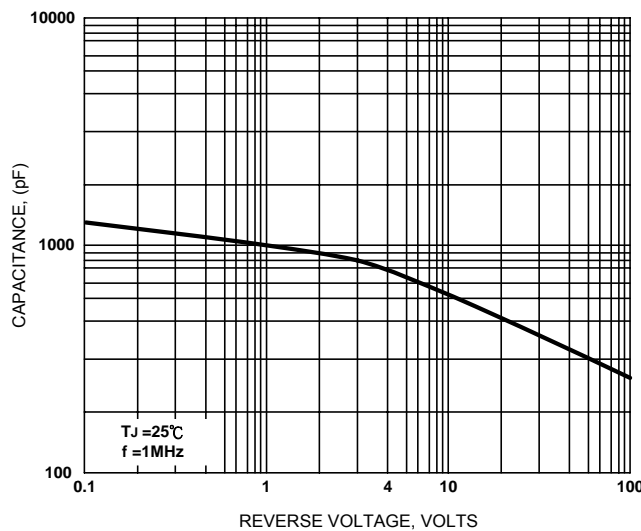
**Figure 2. Maximum Non-repetitive Surge Current**



**Figure 3. Typical Reverse Characteristics**



**Figure 4. Typical Forward Characteristics**



**Figure 5. Typical Junction Capacitance**