

## 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)	0.35	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	Tc = 25°C
		0.35V	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)	1.25 °C/W	Per diode

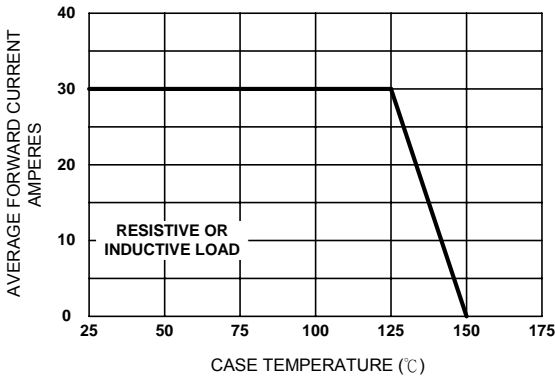
Note: Pulse Test : 380μs pulse width, 2% duty cycle

**TO-247AD**

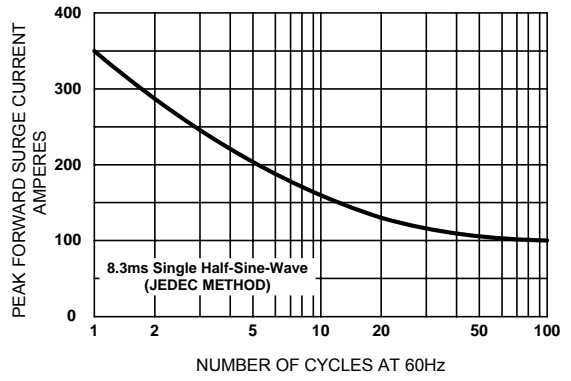
The diagram shows a TO-247AD package with dimensions labeled A through O. A diode symbol is shown below with labels A1, A2, and K.

DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.748	.826	19.00	21.00	
B	.787	.866	20.00	22.00	
C	.598	.638	15.20	16.20	
D	.132	.150	3.35	3.80	
E	.217	.242	5.50	6.15	
F	.209	.232	5.30	5.90	
G	.077	.087	1.95	2.20	
H	.161	.177	4.10	4.50	
I	.551	.610	14.00	15.50	
J	.045	.055	1.15	1.40	
K	.197	.219	5.00	5.55	
L	.189	.205	4.80	5.20	
M	.024	.031	0.60	0.80	
N	.086	.095	2.20	2.40	
O	.116	.128	2.95	3.25	

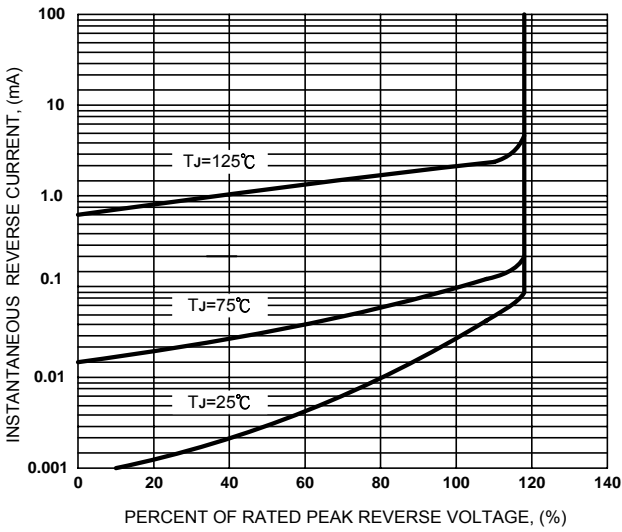
August 2007 / Rev.5



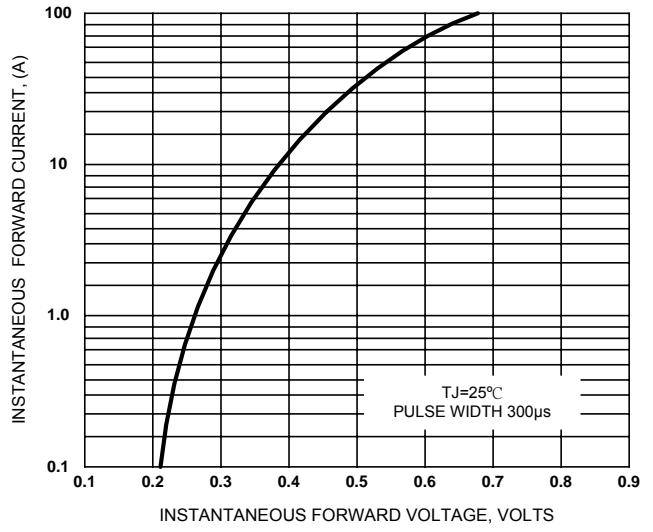
**Figure 1. Forward Current Derating Curve**



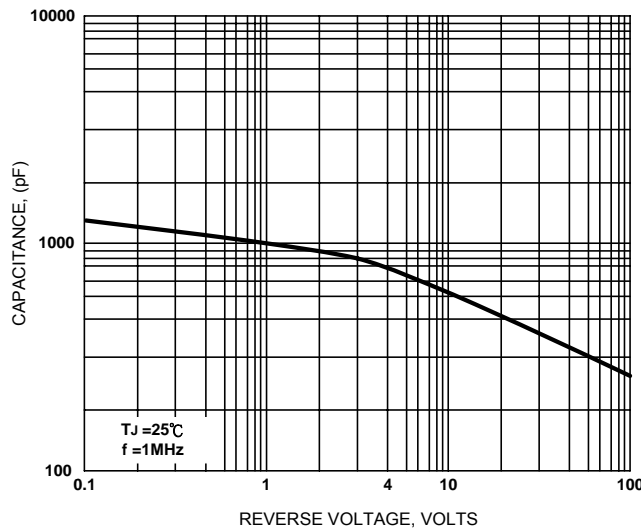
**Figure 2. Maximum Non-repetitive Surge Current**



**Figure 3. Typical Reverse Characteristics**



**Figure 4. Typical Forward Characteristics**



**Figure 5. Typical Junction Capacitance**