

Power Schottky Rectifier - 60Amp 40Volt

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
$I_F(AV)$	60	A	At $T_c=125^\circ C$
V_{RRM}	40	V	Maximum repetitive peak reverse voltage
I_{FSM}	500	A	8.3ms single half sine-wave single shot
$V_F(max)$	0.60	V	At $I_F=30A, T_c=25^\circ C$
T_j	-50 to +150	$^\circ C$	
T_{stg}	-50 to +125	$^\circ C$	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.60V	$T_j=25^\circ C$
Forward Voltage		0.55V	$T_j=125^\circ C$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA	$T_j=25^\circ C$
		50mA	$T_j=125^\circ C$
Voltage Rate of Change	dv/dt	10,000 V/us	Rated V_R
Typical Thermal Resistance, Junction to Case	$R_{th(j-c)}$	1.25 $^\circ C/W$	Per diode

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

T0-247AD

The diagram shows a mechanical drawing of the T0-247AD package with dimensions labeled A through O. Below the drawing is a diode symbol with terminals A1, A2, and K.

DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.780	.819	19.80	20.80	
B	.807	.846	20.50	21.50	
C	.606	.638	15.40	16.20	
D	.138	.150	3.50	3.80	
E	.226	.242	5.75	6.15	
F	.209	.224	5.30	5.70	
G	.077	.085	1.95	2.15	
H	.163	.175	4.15	4.45	
I	.591	.622	15.00	15.80	
J	.043	.051	1.10	1.30	
K	.197	.213	5.00	5.40	
L	.189	.205	4.80	5.20	
M	.024	.031	0.60	0.80	
N	.085	.096	2.15	2.45	
O	.079	.091	2.00	2.30	

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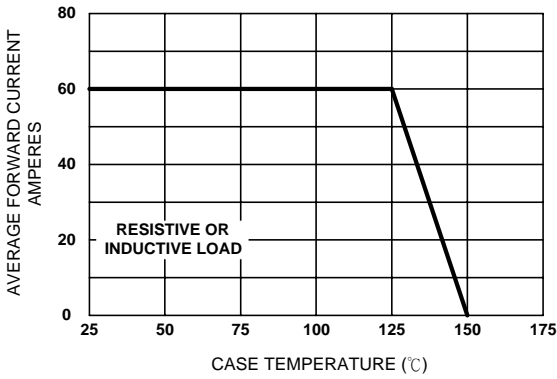


Figure 1. Forward Current Derating Curve

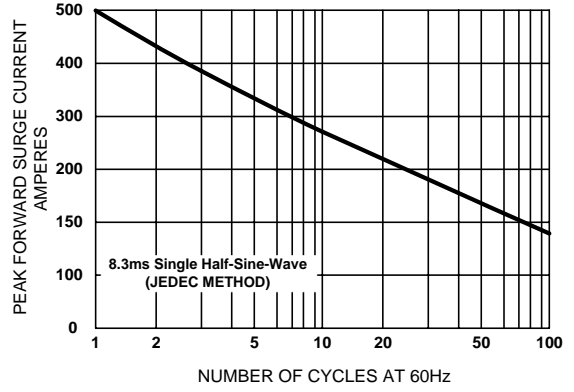


Figure 2. Maximum Non-repetitive Surge Current

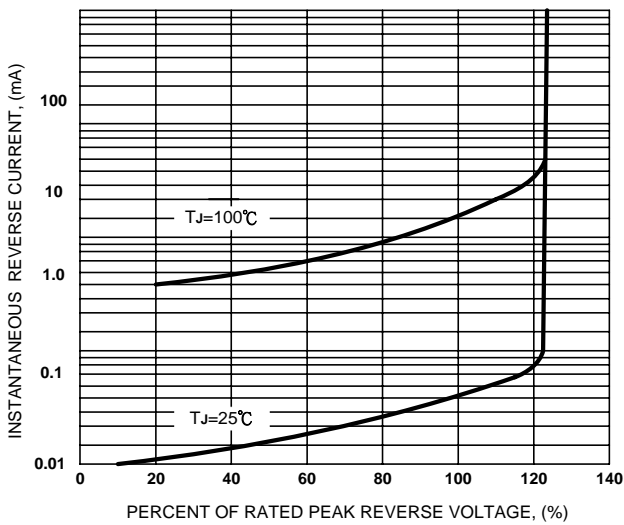


Figure 3. Typical Reverse Characteristics

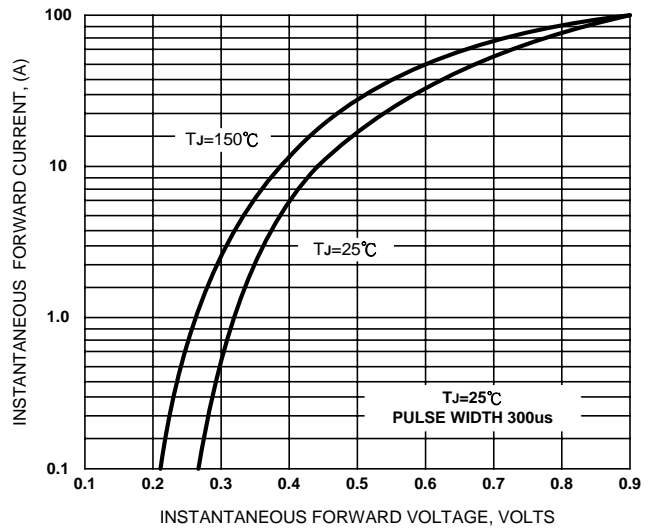


Figure 4. Typical Forward Characteristics

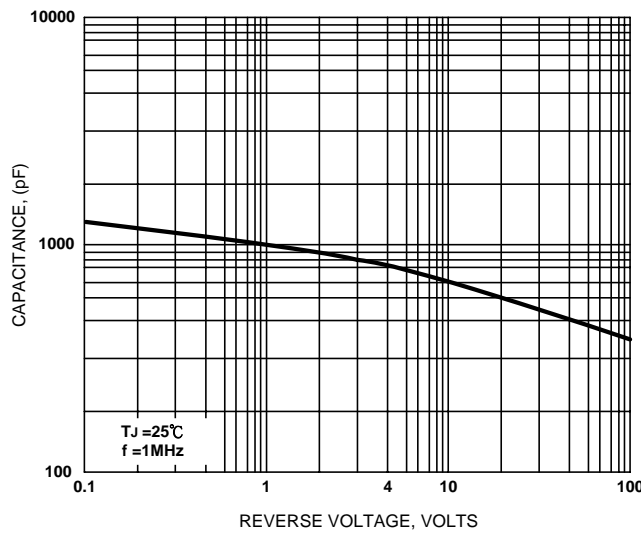


Figure 5. Typical Junction Capacitance