

Power Schottky Rectifier - 40Amp 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

Application

- Switching-Mode Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I _{F(AV)}	40	A	Average Forward Current
V _{RRM}	60	V	Repetitive Peak Reverse Voltage
I _{FSM}	400	A	Peak Forward Surge Current
V _F	0.50	V	Forward Voltage Drop
T _j	-50 to +150	°C	Operating Temperature
T _{stg}	-50 to +150	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V _F	0.65V 0.50V	I _F = 20A T _c = 25°C T _c = 125°C
Maximum Reverse Leakage Current	I _R	1.0mA	V _R = 60V T _c = 25°C
Maximum Voltage Rate of Change	dv/dt	10,000 V/μs	Rated V _R
Typical Thermal Resistance, Junction to Case	R _{θ(j-c)}	2.2 °C/W	Per diode

T0-220AB

The diagram shows a mechanical drawing of the T0-220AB 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	.579	.606	14.70	15.40	
B	.392	.411	9.95	10.45	
C	.104	.116	2.65	2.95	
D	.248	.272	6.30	6.90	
E	.325	.350	8.25	8.90	
F	.126	.157	3.20	4.00	
G	.492	.551	12.50	14.00	
H	.096	.108	2.45	2.75	
I	.028	.039	0.70	1.00	
J	.010	.022	0.25	0.55	
K	.146	.157	3.70	4.00	
L	.167	.187	4.25	4.75	
M	.045	.057	1.15	1.45	
N	.089	.114	2.25	2.90	
O	.047	.055	1.20	1.40	

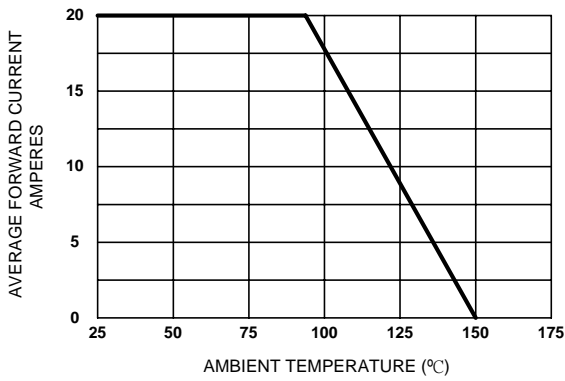


Figure 1. Forward Current Derating Curve

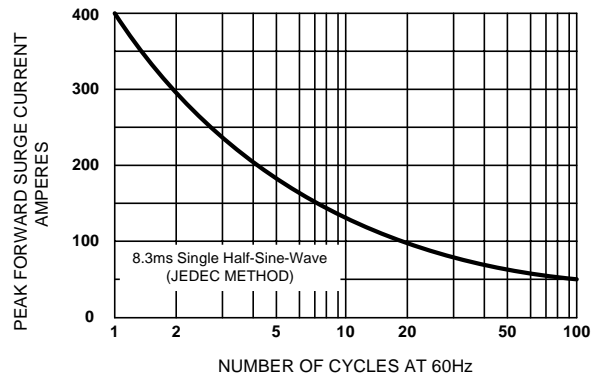


Figure 2. Maximum Non-repetitive Surge Current

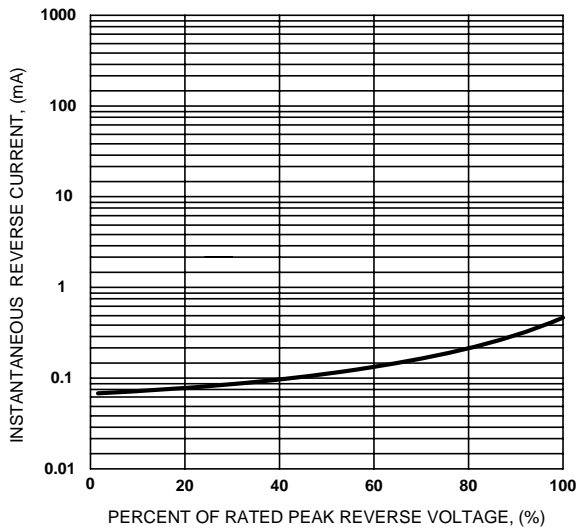


Figure 3. Typical Reverse Characteristics

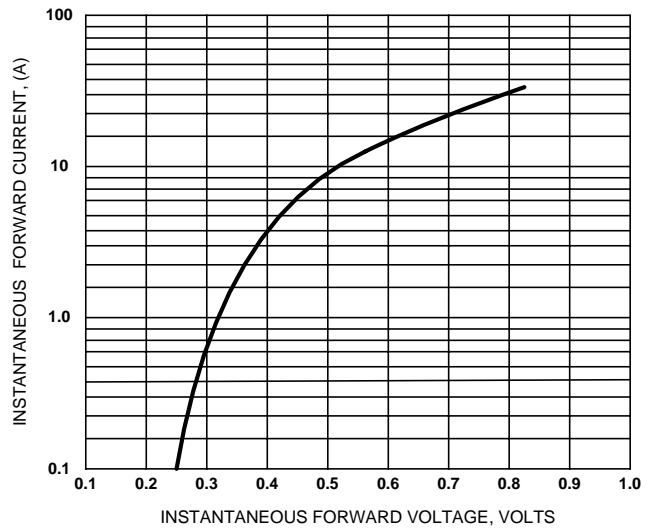


Figure 4. Typical Forward Characteristics

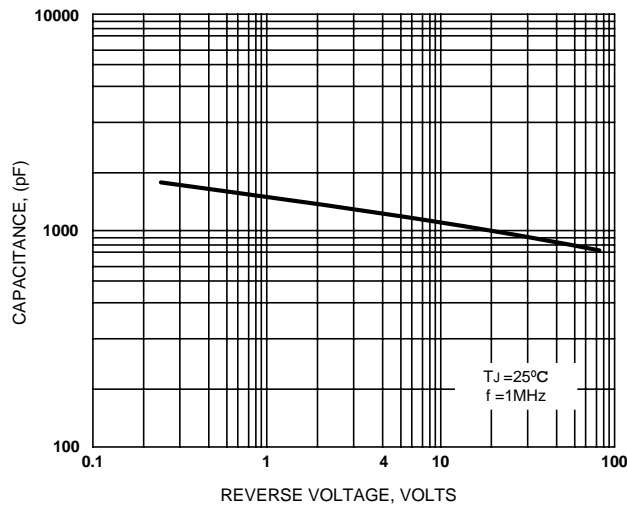


Figure 5. Typical Junction Capacitance