

**Power Schottky Rectifier - 20Amp 45Volt**

**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**

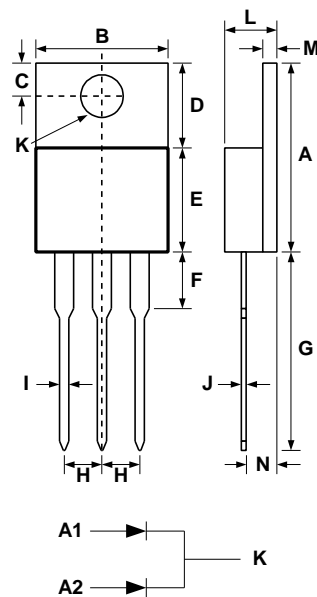
Symbol	Ratings	Unit	Conditions
I <sub>F(AV)</sub>	20	A	At T <sub>c</sub> =125°C
V <sub>RRM</sub>	45	V	Maximum repetitive peak reverse voltage
I <sub>FSM</sub>	150	A	8.3ms single half sine-wave single shot
V <sub>F(max)</sub>	0.6	V	At I <sub>F</sub> =10A, T <sub>c</sub> =25°C
T <sub>j</sub>	-50 to +125	°C	
T <sub>stg</sub>	-50 to +125	°C	

**Electrical characteristics**

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.6V	T <sub>c</sub> =25°C
Forward Voltage		0.5V	T <sub>c</sub> =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	1.0mA	T <sub>c</sub> =25°C
Voltage Rate of Change	dv/dt	10,000 V/μs	Rated V <sub>R</sub>
Typical Thermal Resistance, Junction to Case	R <sub>th(j-c)</sub>	1.5 °C/W	Per diode

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

**TO-220AB**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.579	.602	14.70	15.30	
B	.392	.411	9.95	10.45	
C	.104	.116	2.65	2.95	
D	.248	.264	6.30	6.70	
E	.325	.344	8.25	8.75	
F	.126	.138	3.20	3.50	
G	.524	.547	13.30	13.90	
H	.096	.108	2.45	2.75	
I	.030	.035	0.75	0.90	
J	.016	.022	0.40	0.55	
K	.146	.157	3.70	4.00	
L	.171	.187	4.35	4.75	
M	.049	.057	1.25	1.45	
N	.102	.114	2.60	2.90	

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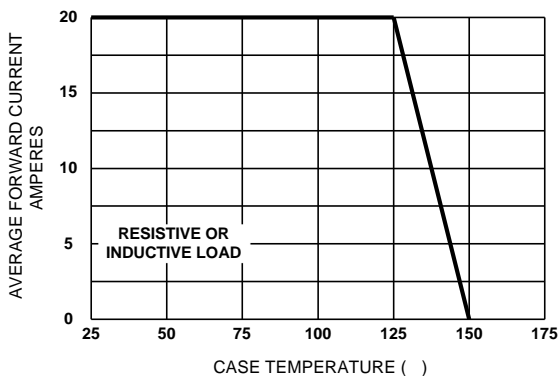


Figure 1. Forward Current Derating Curve

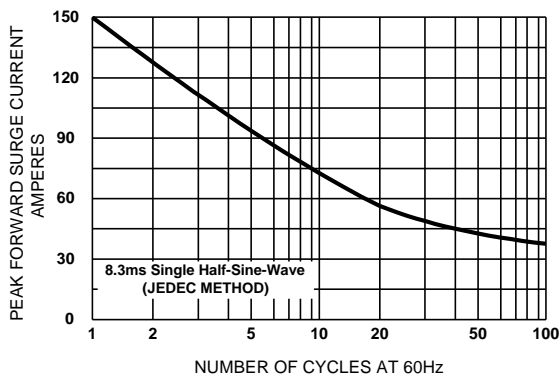


Figure 2. Maximum Non-repetitive Surge Current

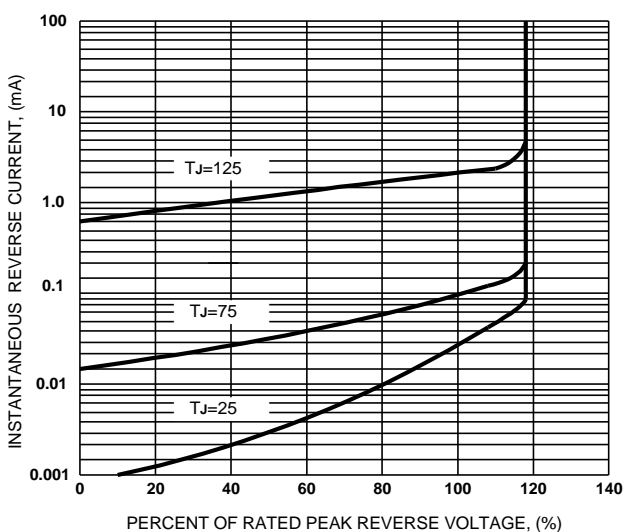


Figure 3. Typical Reverse Characteristics

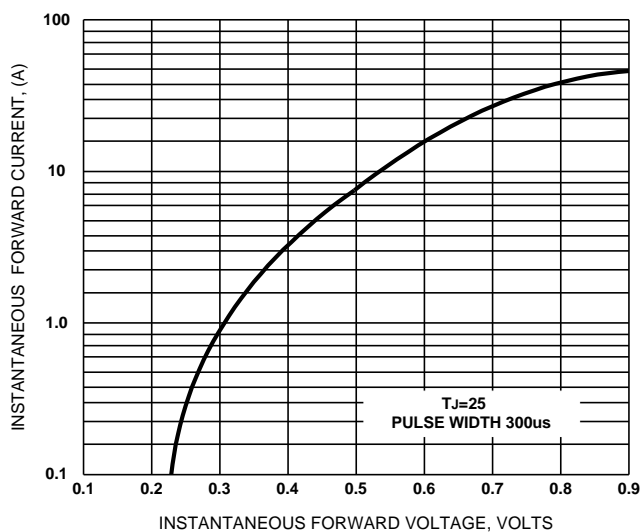


Figure 4. Typical Forward Characteristics

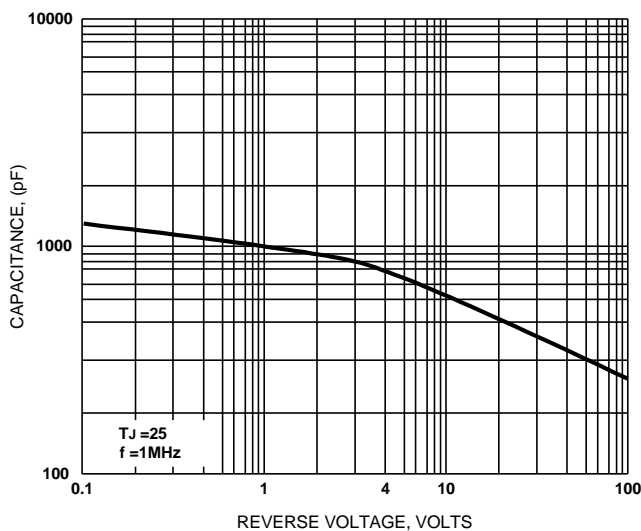


Figure 5. Typical Junction Capacitance