

Power Schottky Rectifier - 20Amp 15Volt

Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- Optimized for OR-ing applications
- Ultra low forward voltage, high current capability
- High surge capacity
- Ultra low power loss, high efficiency

Application

- For the OR-ing of Parallel Power Supplies
- Solar-System Control Box

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
$I_F(AV)$	20	A	Average Forward Current
V_{RRM}	15	V	Repetitive Peak Reverse Voltage
I_{FSM}	150	A	Peak Forward Surge Current
V_F	0.31	V	Forward Voltage Drop
T_j, T_{stg}	-50 to +125	°C	Operating and Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.41V	Per Leg at $I_F = 20A$ $T_c = 25^\circ C$
		0.31V	$T_c = 125^\circ C$
Maximum Reverse Leakage Current	I_R	15.0mA	Per Leg at $V_R = 15V$ $T_c = 25^\circ C$
		500mA	$T_c = 125^\circ C$
Maximum Voltage Rate of Change	dv/dt	10,000 V/ μs	Rated V_R
Typical Thermal Resistance, Junction to Case	$R_{\theta(j-c)}$	2.2 °C/W	Per Leg TO-220AC
		4.5 °C/W	ITO-220AC

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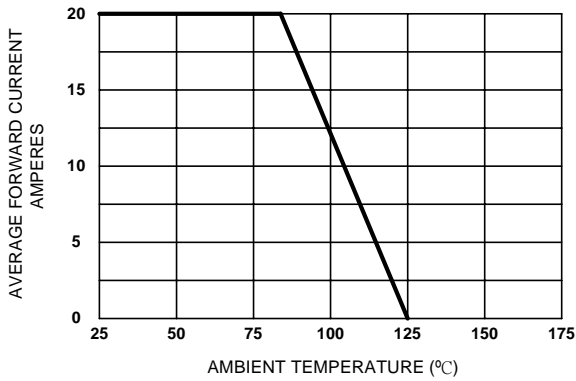


Figure 1. Forward Current Derating Curve

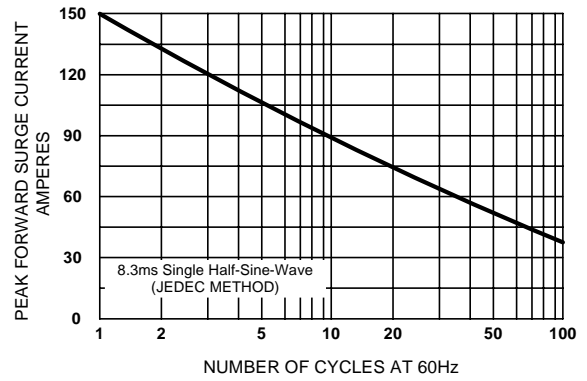


Figure 2. Maximum Non-repetitive Surge Current

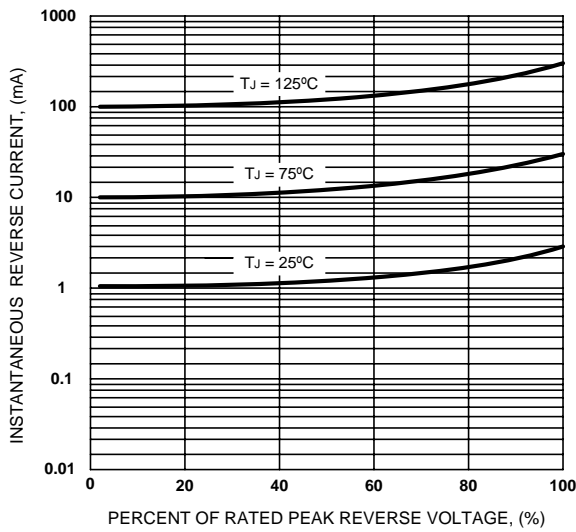


Figure 3. Typical Reverse Characteristics

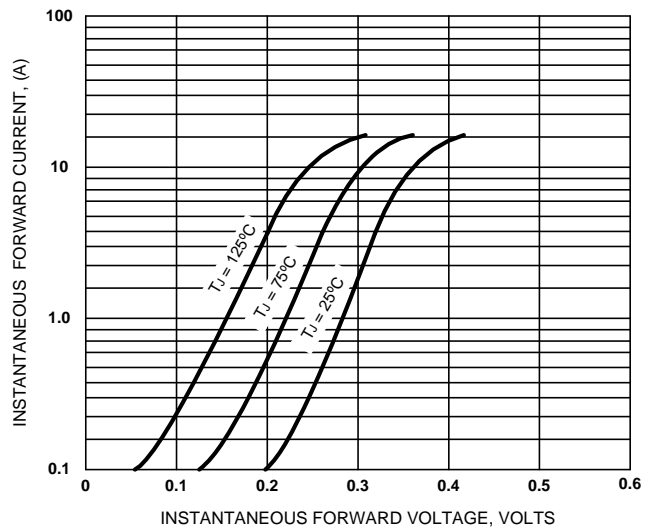


Figure 4. Typical Forward Characteristics

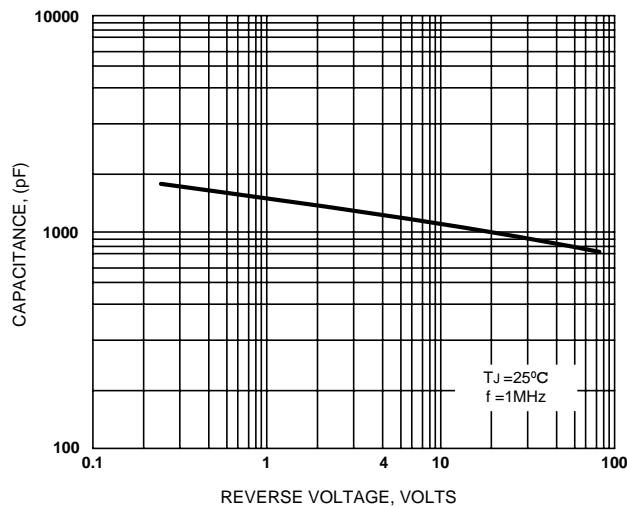
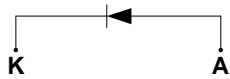
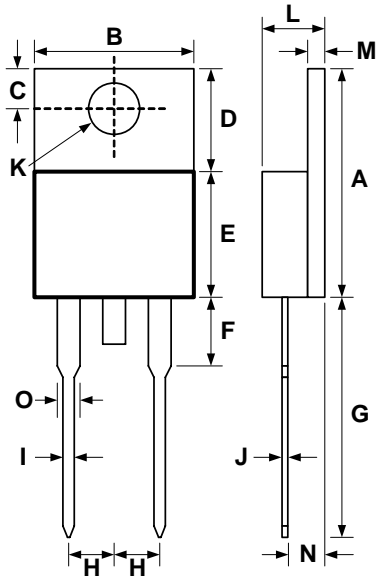


Figure 5. Typical Junction Capacitance

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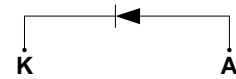
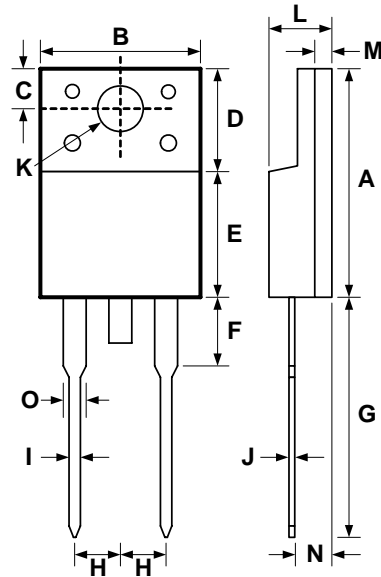
TO-220AC



DIM	DIMENSIONS				NOTE
	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	

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DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.577	.640	14.65	16.25	
B	.386	.406	9.80	10.30	
C	.098	.114	2.50	2.90	
D	.258	.274	6.55	6.95	
E	.315	.331	8.00	8.40	
F	.079	.161	2.00	4.10	
G	.492	.571	12.50	14.50	
H	.089	.106	2.25	2.70	
I	.024	.035	0.60	0.90	
J	.020	.028	0.50	0.70	
K	.120	.138	3.05	3.50	
L	.169	.189	4.30	4.80	
M	.031	.063	0.80	1.60	
N	.079	.112	2.00	2.85	
O	.043	.055	1.10	1.40	