

Power Schottky Rectifier - 30Amp 100Volt

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
- ESD performance human body mode > 8 KV

Application

- AC/DC Switching Adaptor and TFT-LCD Power Supply
- SMPS

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
IF(AV)	30	A	Average Forward Current
VRRM	100	V	Repetitive Peak Reverse Voltage
IFSM	350	A	Peak Forward Surge Current
VF(max)	0.67	V	Forward Voltage Drop
Tj	-50 to +175	°C	Operating Temperature
Tstg	-50 to +150	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	VF	0.83V	Tc = 25°C
Forward Voltage		0.67V	Tc = 125°C
Maximum Reverse Leakage Current	IR	0.01mA	Tc = 25°C
Current		10mA	Tc = 125°C
Maximum Voltage Rate of Change	dv/dt	10,000 V/μs	Rated VR
Typical Thermal Resistance, Junction to Case	Rθ(j-c)	2.2 °C/W	Per diode

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

T0-220AB

The drawing shows a top view and a side view of the T0-220AB package. Dimensions A through O are indicated with arrows. A schematic below the drawing shows two diodes, A1 and A2, connected to a common terminal 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	

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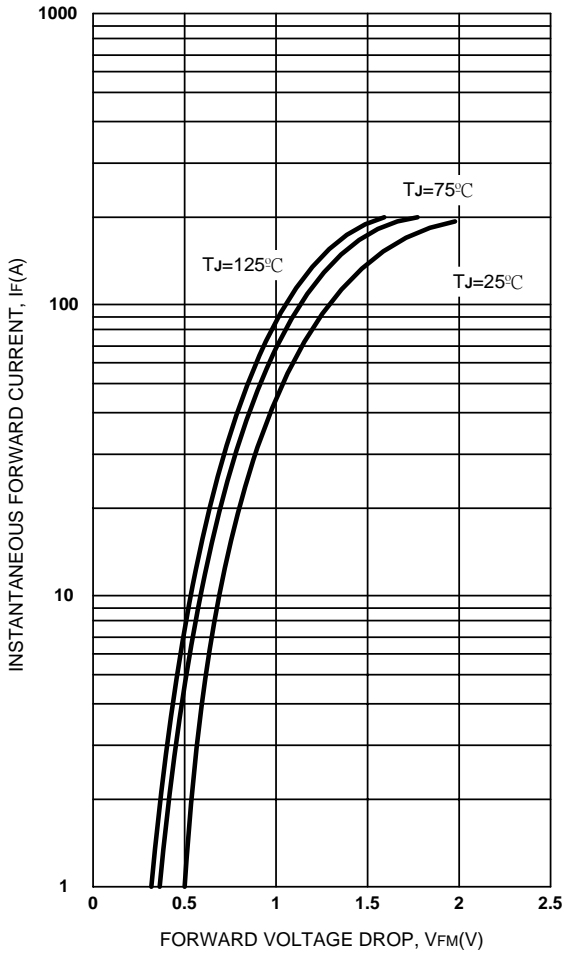


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

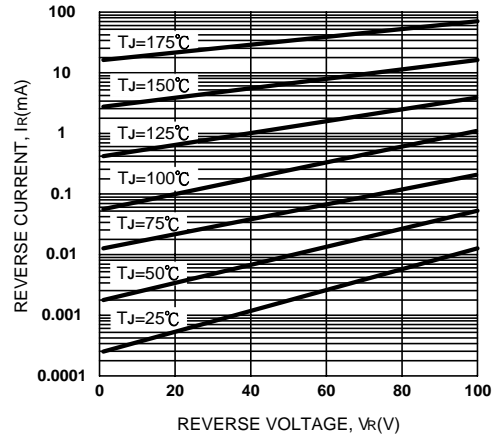


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

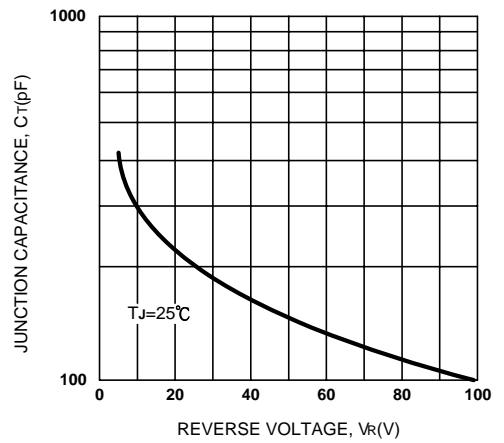


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

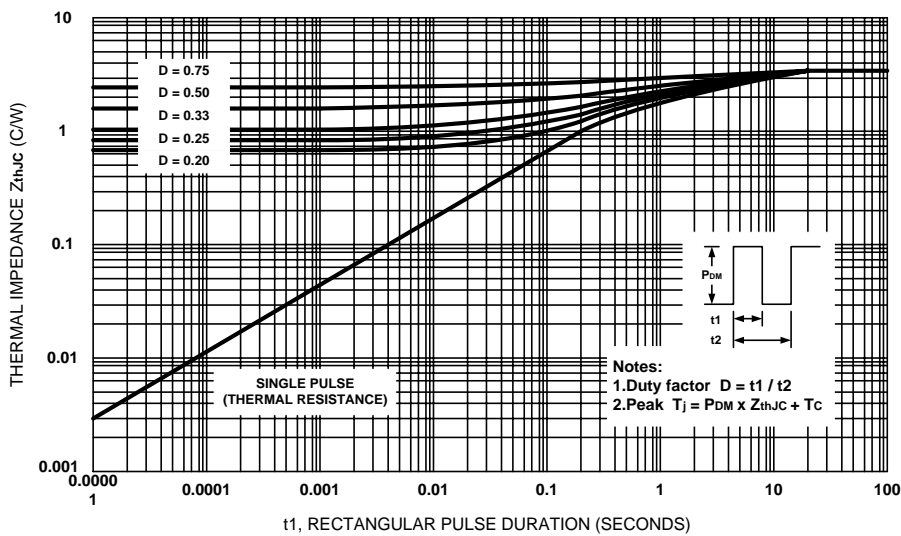


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

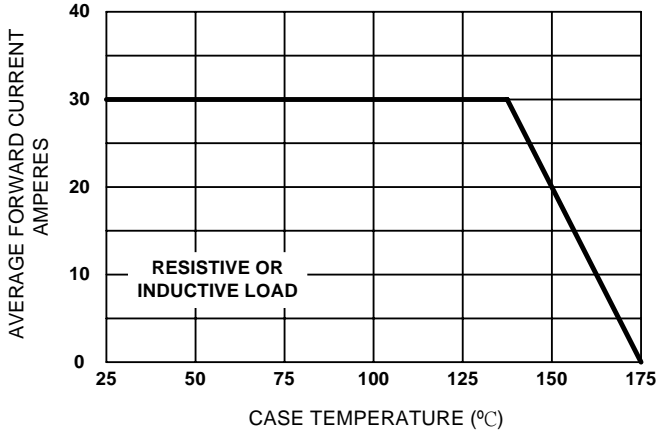


Figure 5. Forward Current Derating Curve

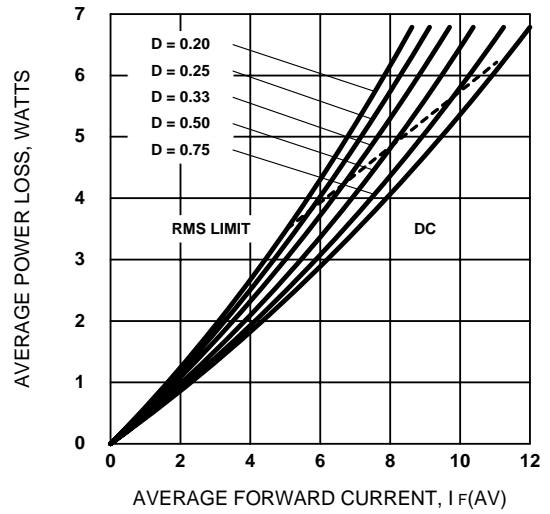


Figure 6. Forward Power Loss Characteristics (Per Leg)

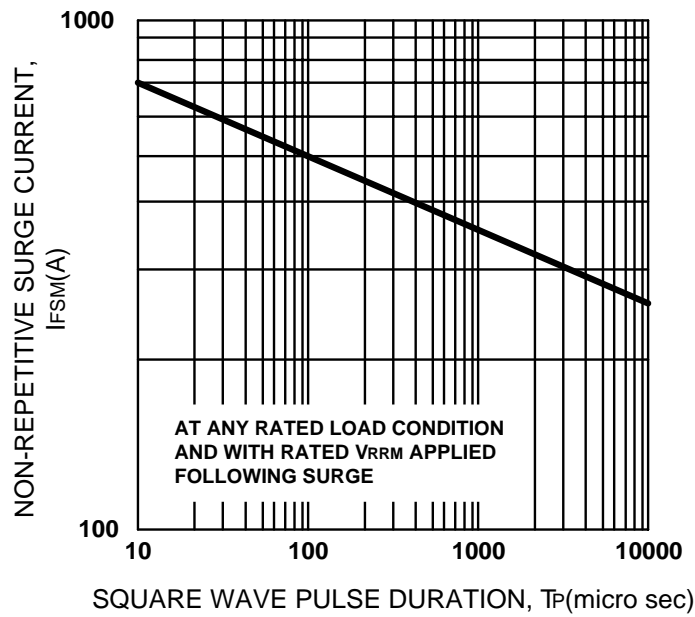


Figure 7. Max. Non-Repetitive Surge Current (Per Leg)