

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
I _{F(AV)}	30	A	Average Forward Current
V _{RRM}	100	V	Repetitive Peak Reverse Voltage
I _{FSM}	350	A	Peak Forward Surge Current
V _{F(max)}	0.63	V	Forward Voltage Drop
T _j	-50 to +175	°C	Operating Temperature
T _{stg}	-50 to +150	°C	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V _F	0.79V	T _c = 25°C
		0.63V	T _c = 125°C
Maximum Reverse Leakage Current	I _R	0.01mA	T _c = 25°C
		10mA	T _c = 125°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

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

T0-220AB

The diagram shows the mechanical dimensions of the T0-220AB package. Dimensions A through O are defined in the table below. A schematic shows two diodes, A1 and A2, connected to a common cathode terminal K.

DIMENSIONS					
DIM	INCHES		MM		NOTE
	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	

August 2008 / Rev.6.1

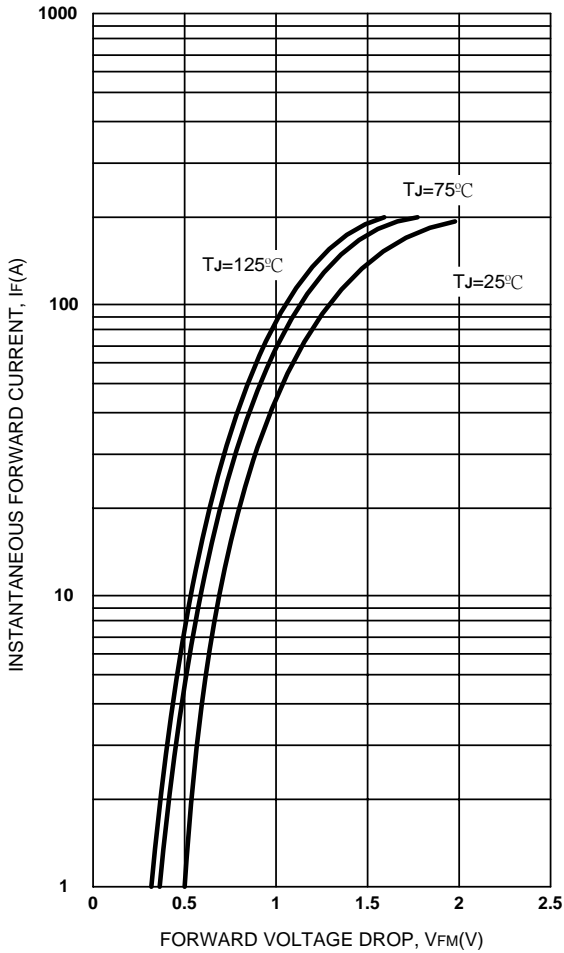


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

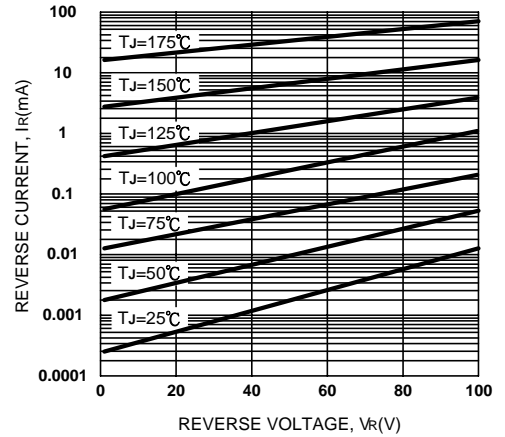


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

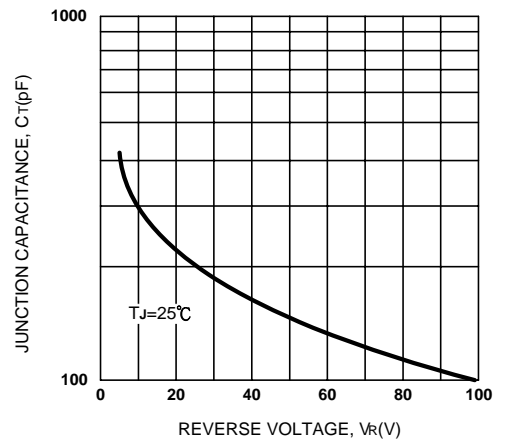


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

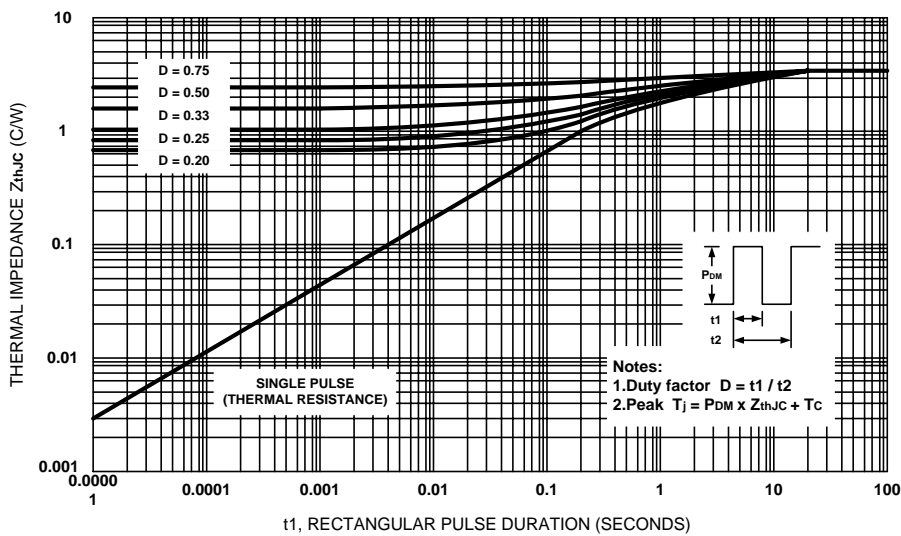


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

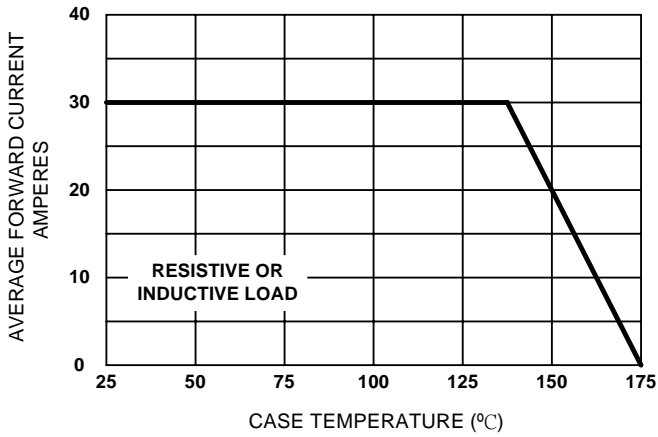


Figure 5. Forward Current Derating Curve

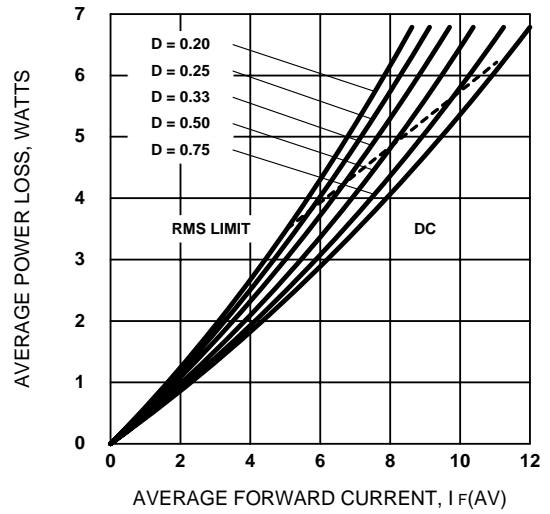


Figure 6. Forward Power Loss Characteristics (Per Leg)

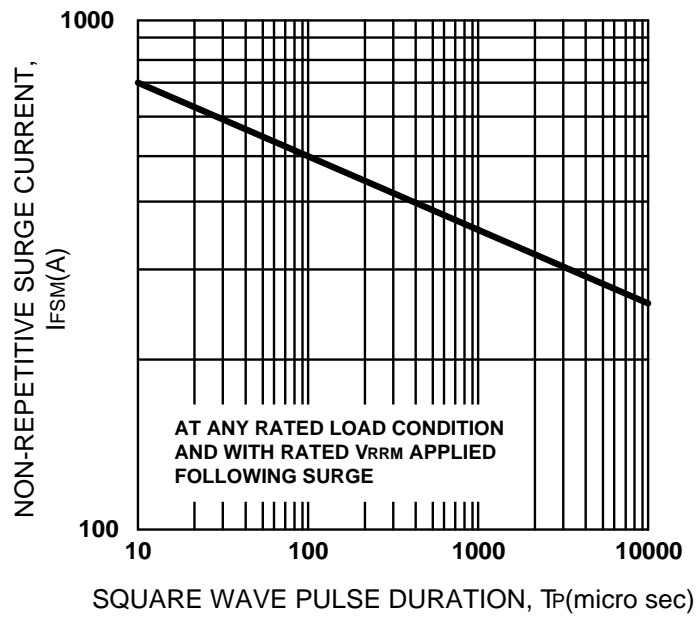


Figure 7. Max. Non-Repetitive Surge Current (Per Leg)