

Power Schottky Rectifier - 40Amp 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

Application

- AC/DC Switching Adaptor and other Switching Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I _{F(AV)}	40	A	At T _c =125°C
V _{RRM}	100	V	Maximum repetitive peak reverse voltage
I _{FSM}	250	A	8.3ms single half sine-wave single shot
V _{F(max)}	0.85	V	At I _F =20A, T _c =25°C
T _j	-50 to +175	°C	
T _{stg}	-50 to +150	°C	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V _F	0.85V	T _c =25°C
		0.75V	T _c =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I _R	50µA	T _c =25°C
		10mA	T _c =125°C
Voltage Rate of Change	dv/dt	10,000 V/µs	Rated V _R
Typical Thermal Resistance, Junction to Case	R _{th(j-c)}	3.25 °C/W	Per diode

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

T0-220AB

The diagram shows a top and side view of the TO-220AB package. Dimensions A through N are indicated. A diode symbol is shown with terminals A1, A2, and K.

DIMENSIONS					NOTE
DIM	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	

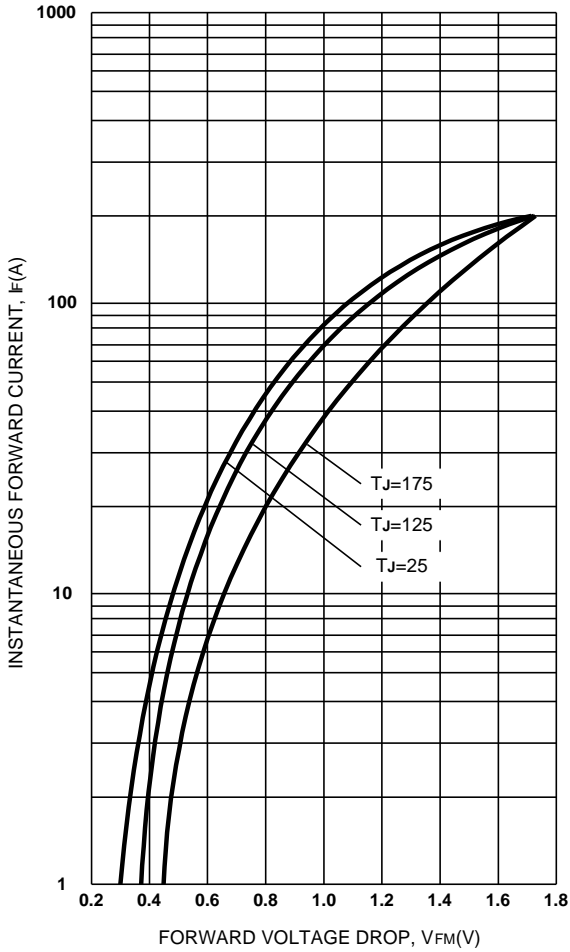


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

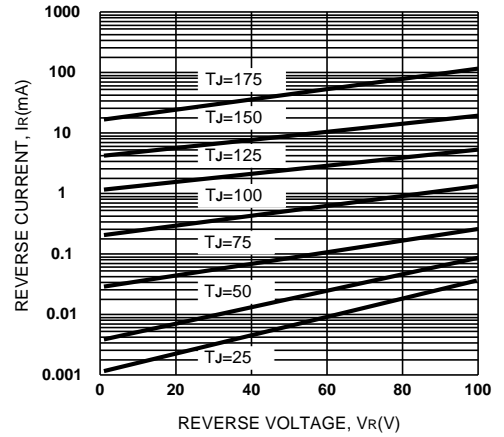


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

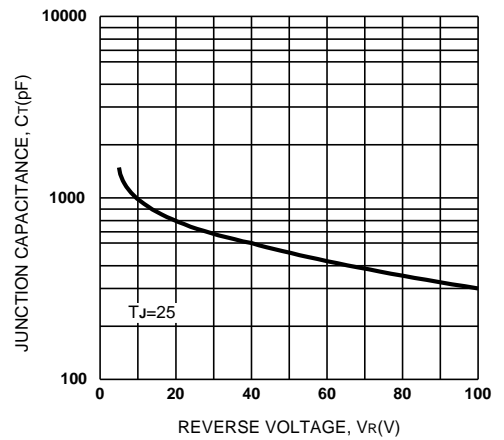


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

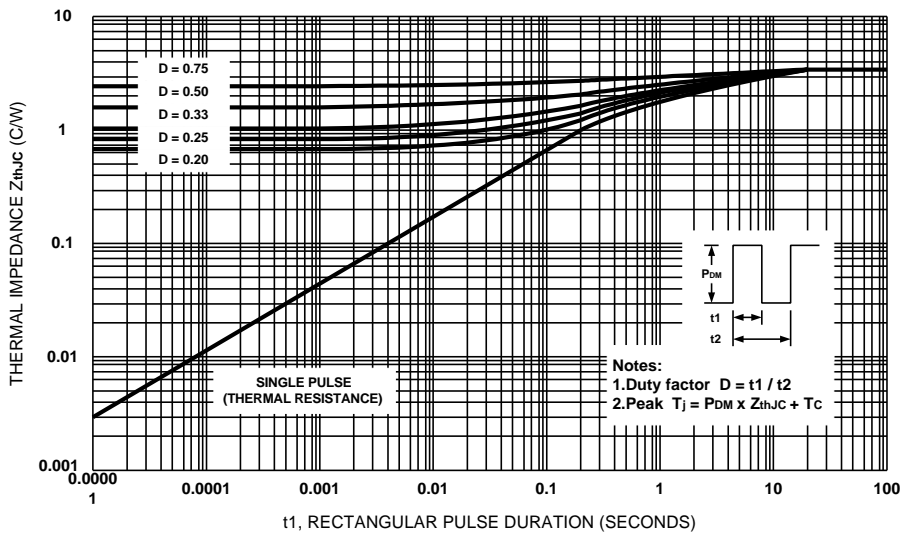


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

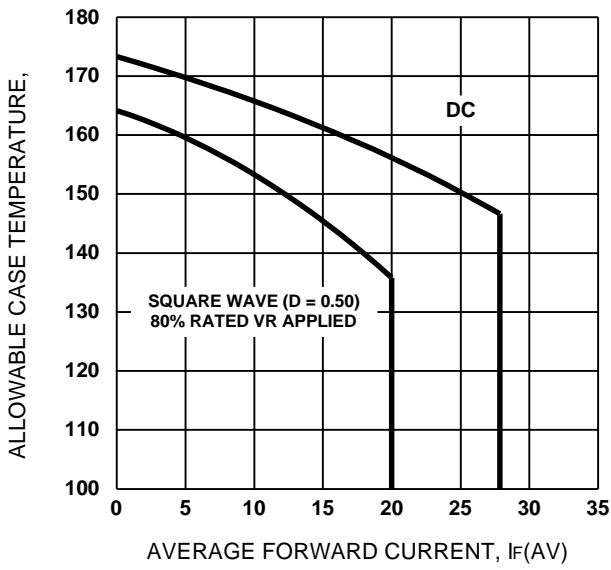


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (Per Leg)

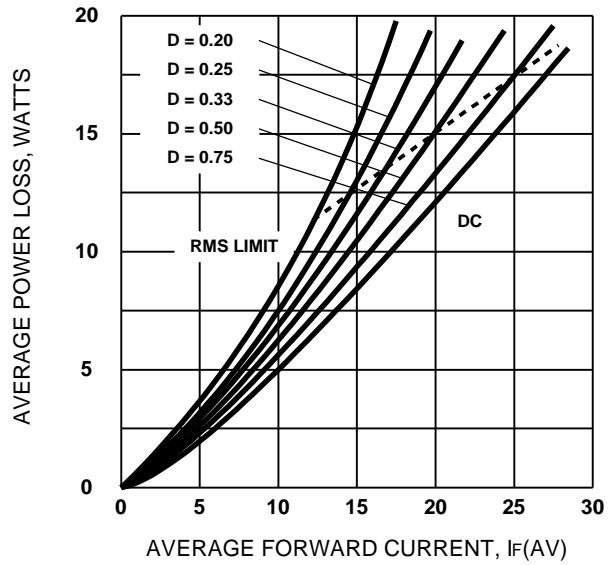


Figure 6. Forward Power Loss Characteristics (Per Leg)

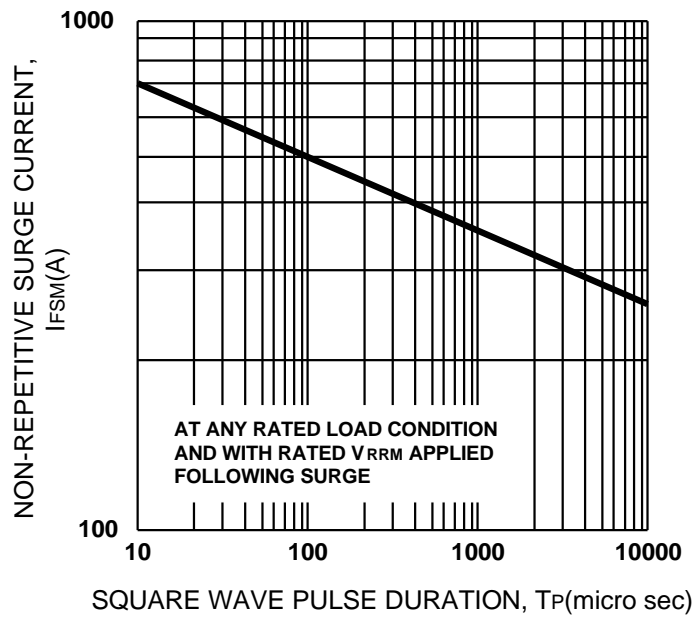


Figure 7. Max. Non-Repulsive Surge Current (Per Leg)