

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

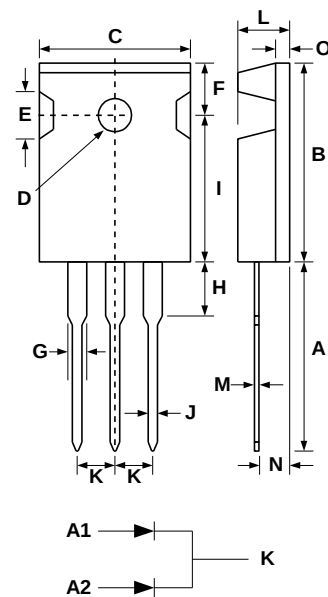
Symbol	Ratings	Unit	Conditions
$I_F(AV)$	40	A	At $T_c=125^\circ C$
V_{RRM}	100	V	Maximum repetitive peak reverse voltage
I_{FSM}	300	A	10ms single or 6ms Rect. pulse
$V_F(max)$	0.85	V	At $I_F=20A$, $T_c=25^\circ C$
T_j	-50 to +175	$^\circ C$	
T_{stg}	-50 to +150	$^\circ C$	

□ Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.85V	$T_c=25^\circ C$
Forward Voltage		0.75V	$T_c=125^\circ C$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	0.05mA 15mA	$T_c=25^\circ C$ $T_c=125^\circ C$
Voltage Rate of Change	dv/dt	10,000 V/ μs	Rated V_R
Typical Thermal Resistance, Junction to Case	$R_{th(j-c)}$	1.25 $^\circ C/W$	Per diode

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

T0-247AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.780	.831	19.80	21.10	
B	.787	.846	20.00	21.50	
C	.598	.638	15.20	16.20	
D	.132	.150	3.35	3.80	
E	.217	.242	5.50	6.15	
F	.209	.238	5.30	6.05	
G	.075	.085	1.90	2.15	
H	.161	.177	4.10	4.50	
I	.559	.622	14.20	15.80	
J	.043	.053	1.10	1.35	
K	.197	.219	5.00	5.55	
L	.189	.205	4.80	5.20	
M	.024	.039	0.60	1.00	
N	.085	.096	2.15	2.45	
O	.075	.091	1.90	2.30	

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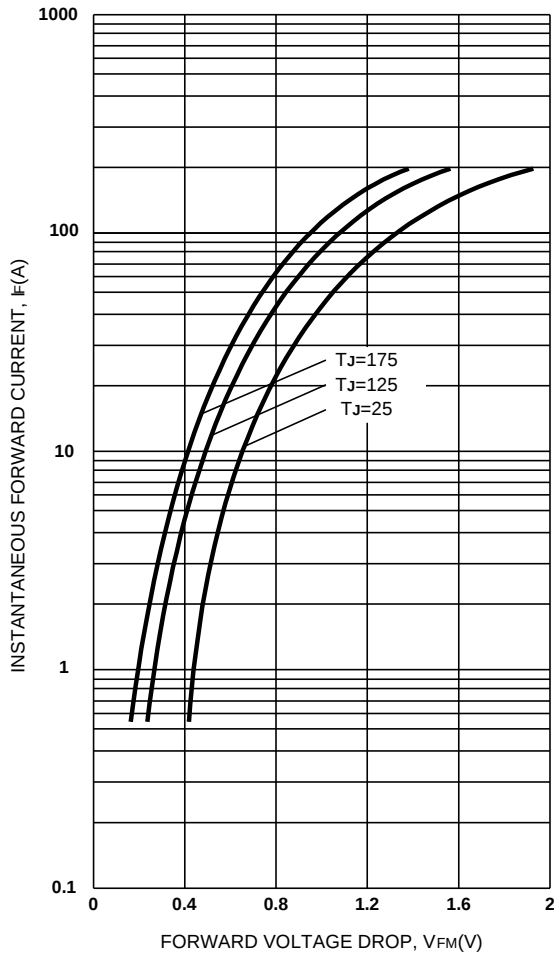


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

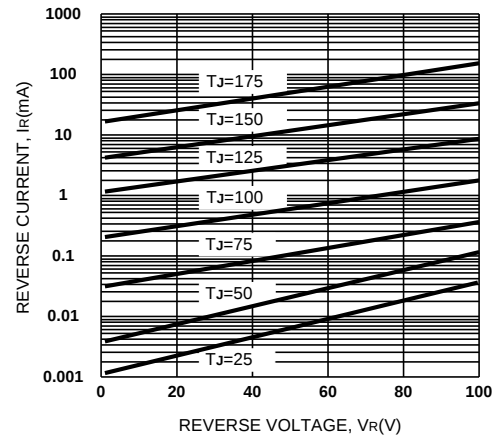


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

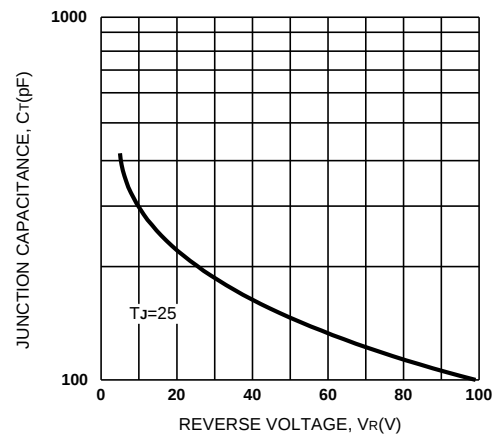


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

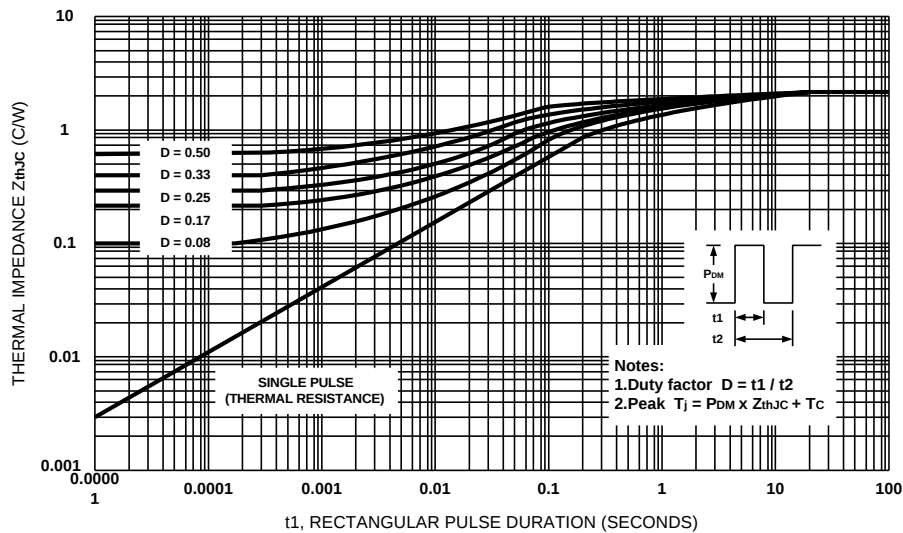


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

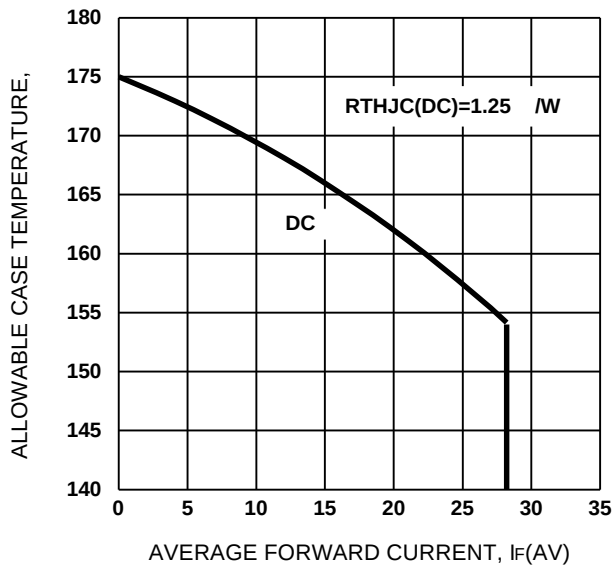


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (PerLeg)

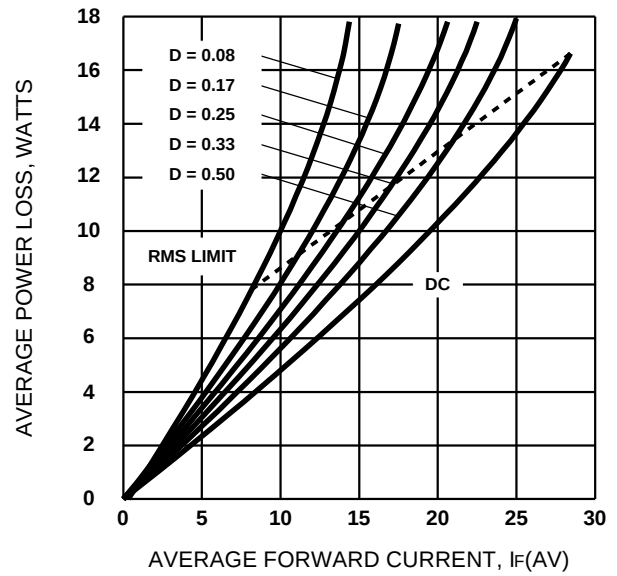


Figure 6. Forward Power Loss Characteristics (PerLeg)

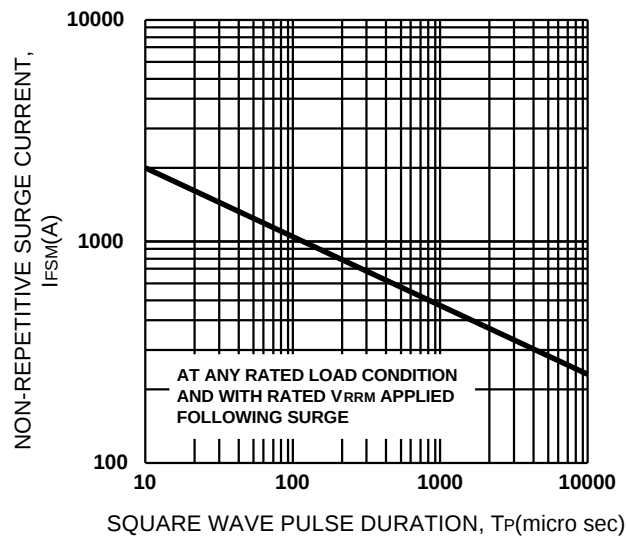


Figure 7. Max. Non-Repetitive Surge Current (PerLeg)