

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

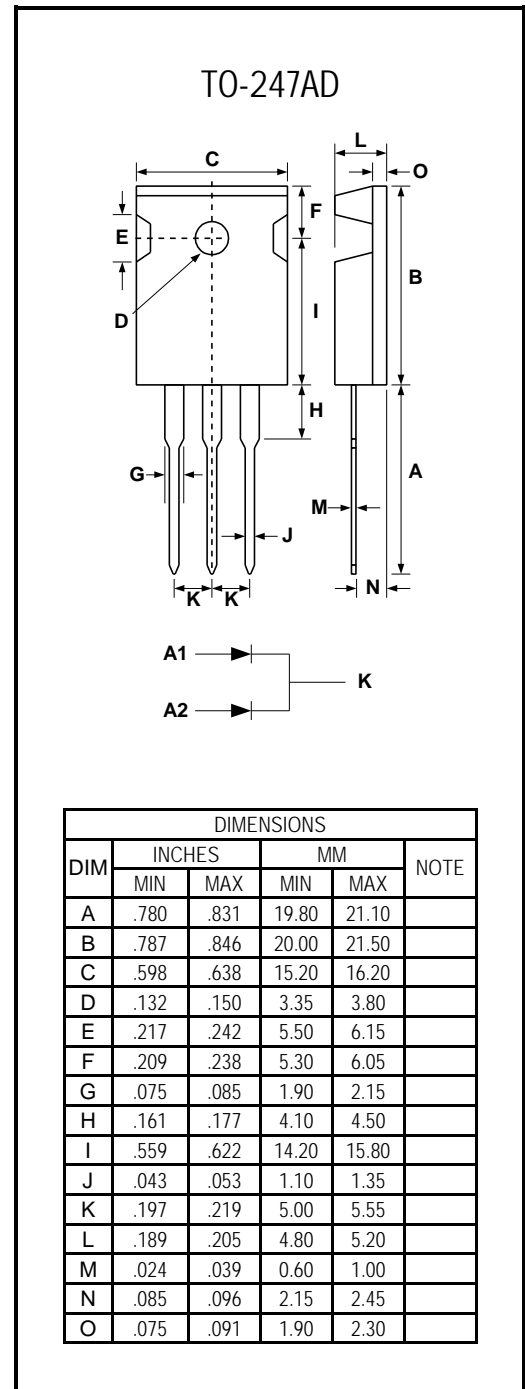
Absolute maximum ratings

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}	300	A	10ms single or 6ms Rect. pulse
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
Forward Voltage		0.75V	T _c =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I _R	0.05mA	T _c =25°C
		15mA	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)}	1.25 °C/W	Per diode

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



April 2004

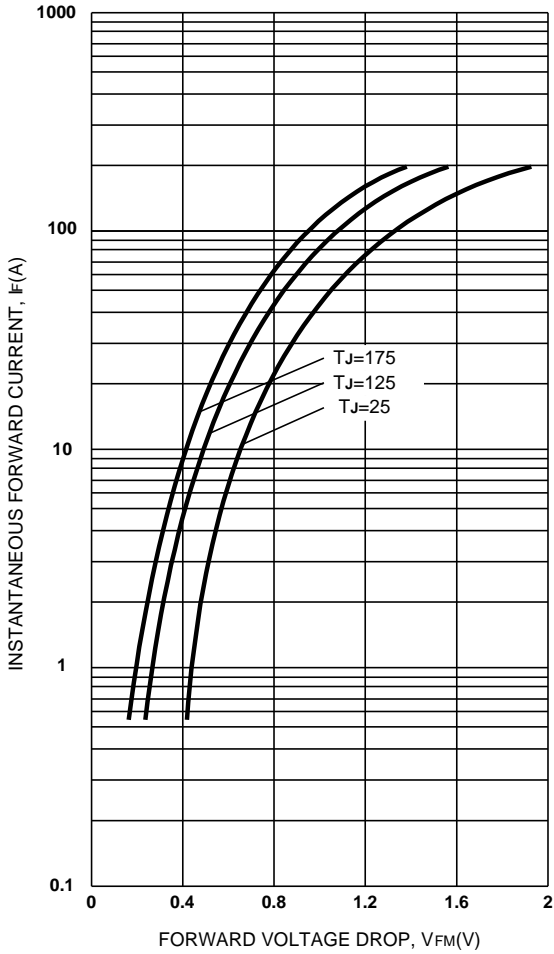


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

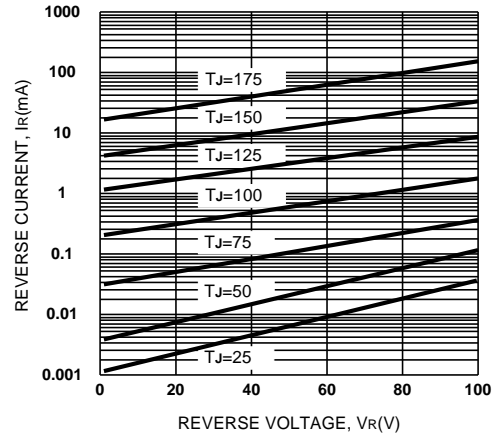


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

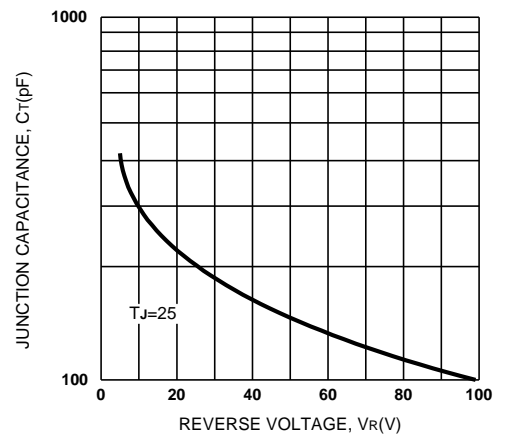


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

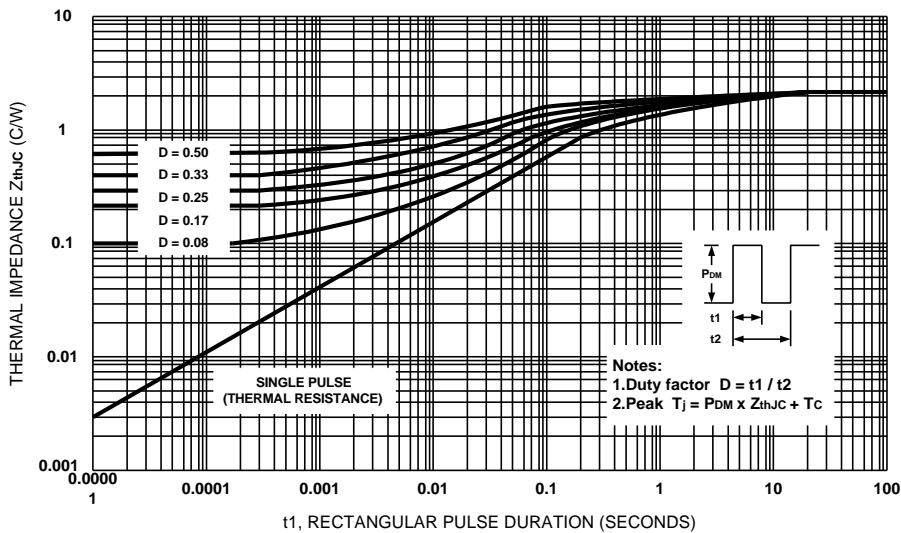


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

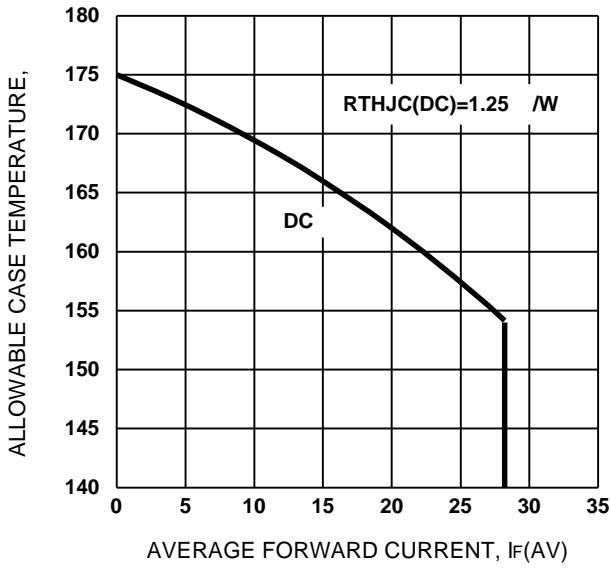


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (PerLeg)

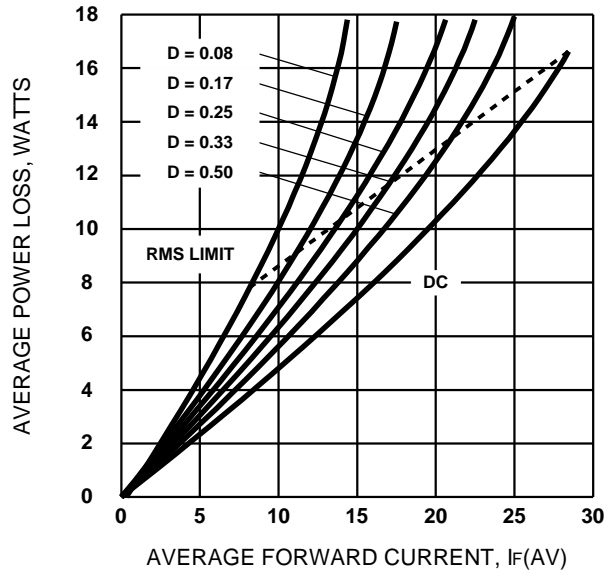


Figure 6. Forward Power Loss Characteristics (PerLeg)

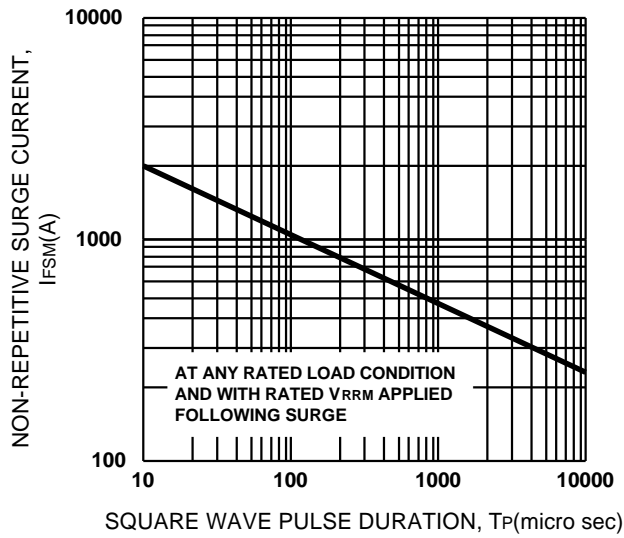


Figure 7. Max. Non-Repetitive Surge Current (PerLeg)