

Power Schottky Rectifier - 40Amp 150Volt

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

- SMPS

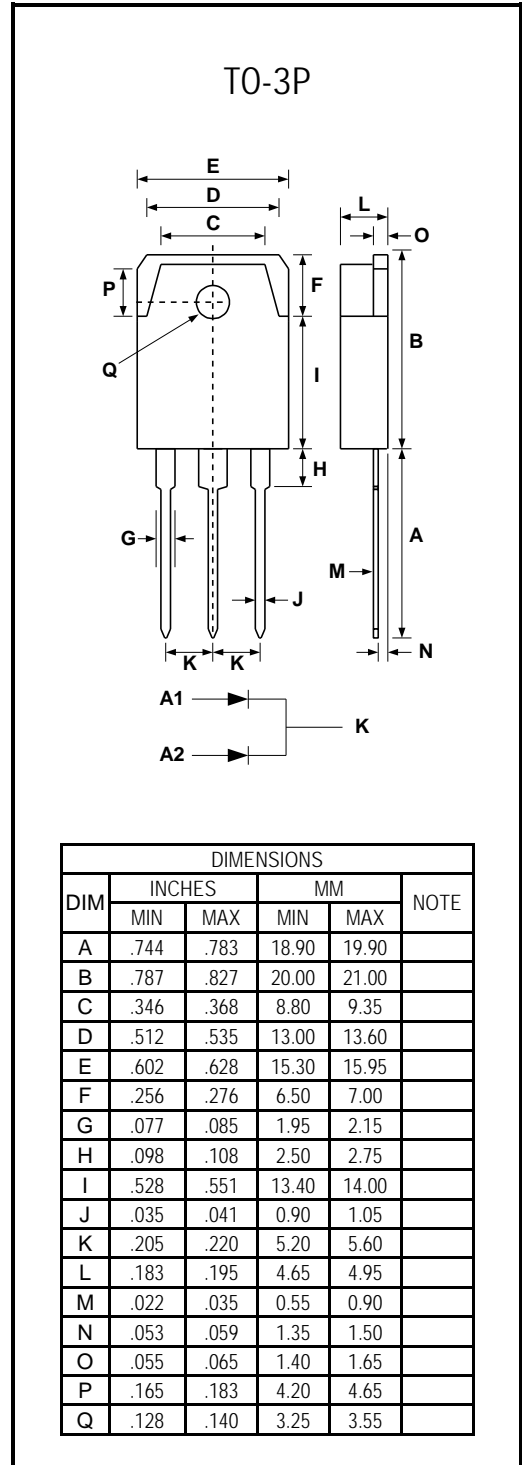
Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I _{F(AV)}	40	A	At T _c =125°C
V _{RRM}	150	V	Maximum repetitive peak reverse voltage
I _{FSM}	280	A	8.3ms single half sine-wave single shot
V _{F(max)}	0.75	V	At I _F =20A, T _c =125°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	0.92V	T _c =25°C
Forward Voltage		0.75V	T _c =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I _R	10μA 10mA	T _c =25°C 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)}	1.2 °C/W	Per diode

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



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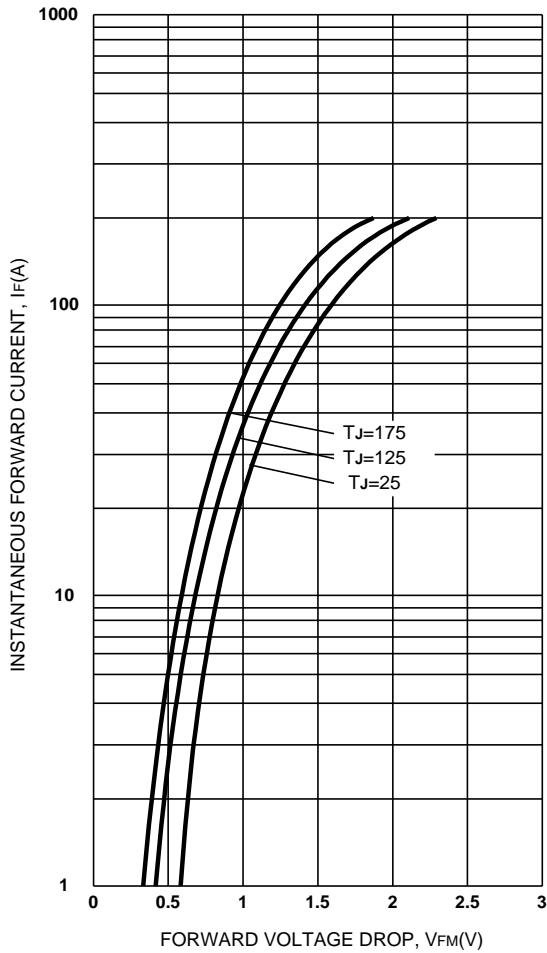


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

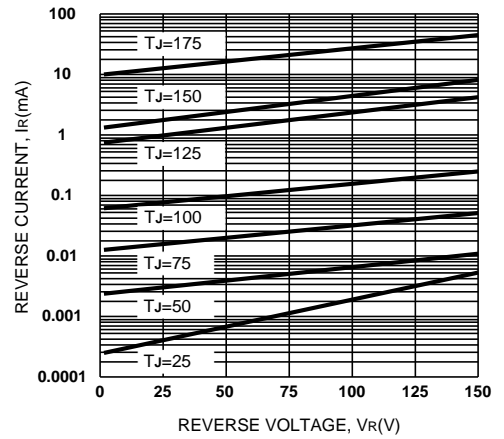


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

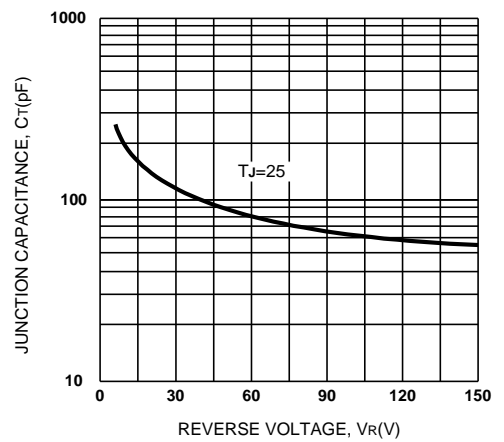


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

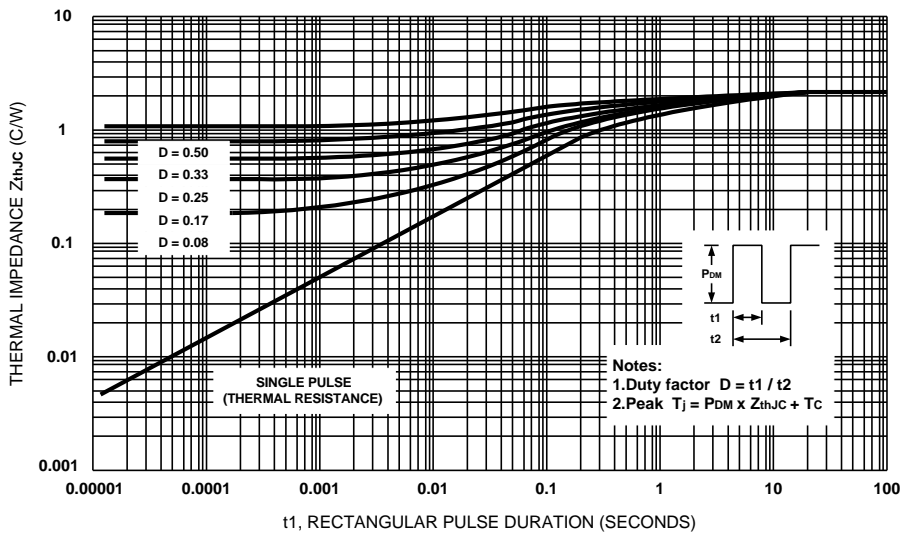


Figure 4. Max. Thermal Impedance Z_{thJC} Characteristics (PerLeg)

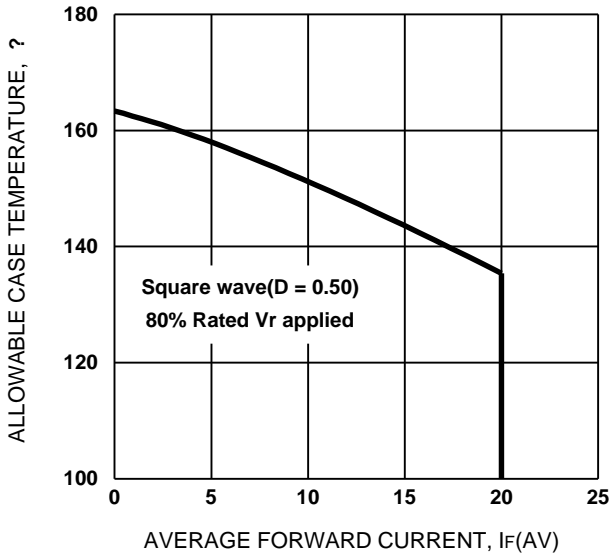


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (PerLeg)

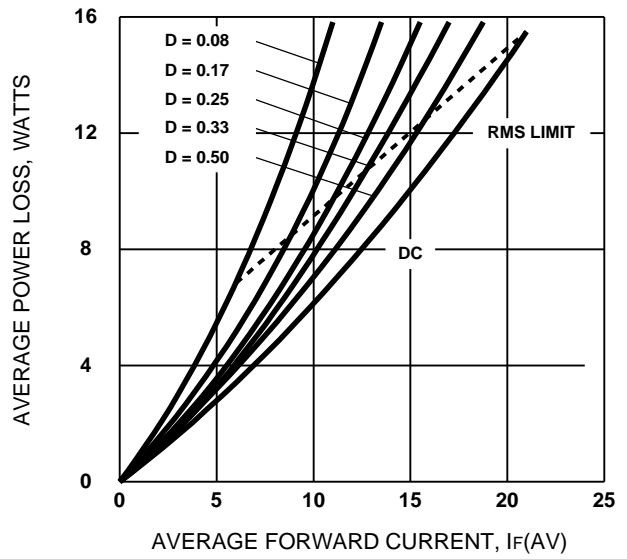


Figure 6. Forward PowerLoss Characteristics (PerLeg)

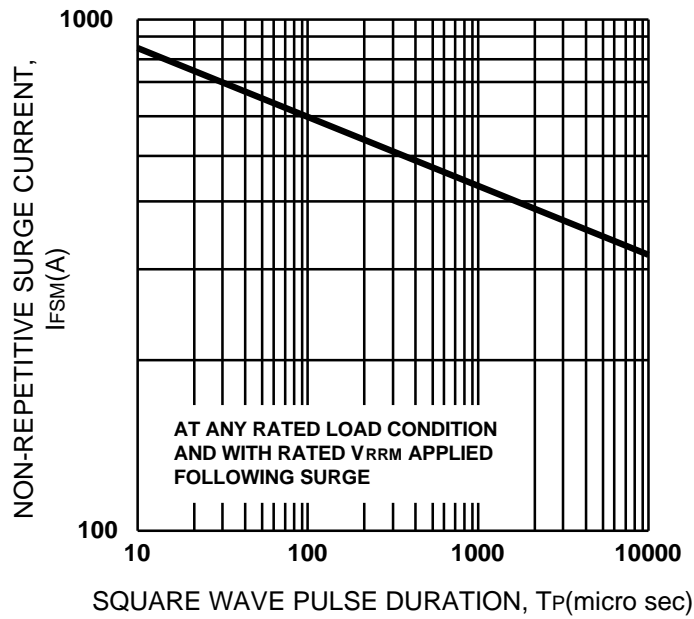


Figure 7. Max. Non-Repetitive Surge Current (PerLeg)