

Power Schottky Rectifier - 45Amp 45Volt

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

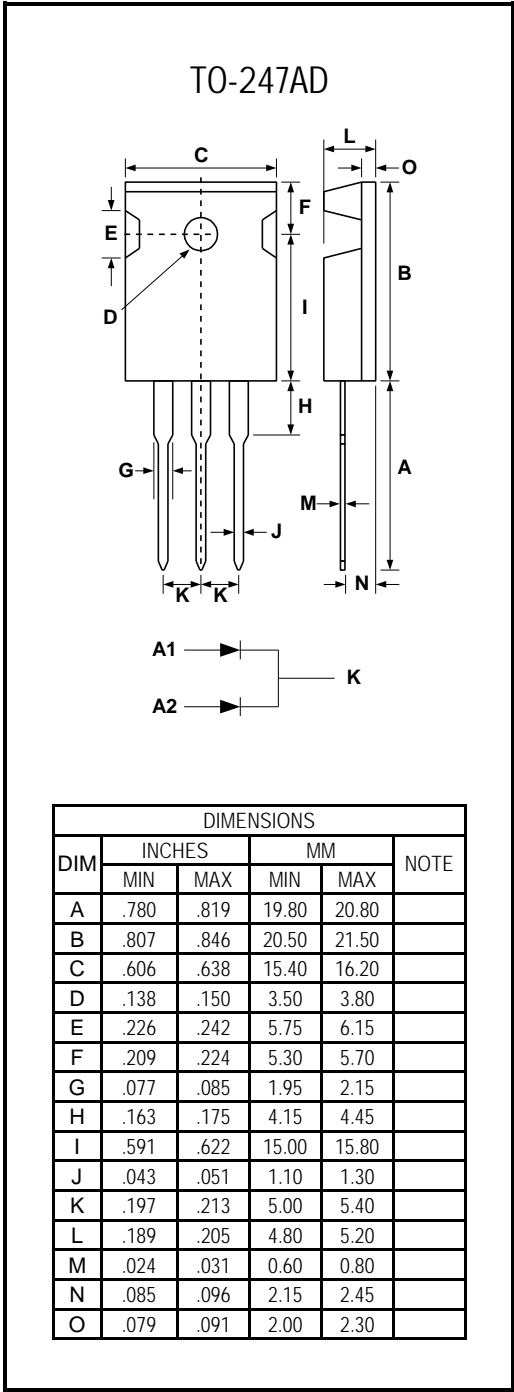
- Switching-Mode Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I _{F(AV)}	30	A1	At T _c =125°C
	15	A2	
V _{RRM}	45	V	Maximum repetitive peak reverse voltage
I _{FSM}	250	A	8.3ms single half sine-wave single shot
V _{F(max)}	0.60	V	At I _F =15A, T _c =25°C
T _j	-50 to +125	°C	
T _{stg}	-50 to +125	°C	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V _F	0.60V	T _c =25°C
Maximum Reverse Current At Rated DC Blocking Voltage	I _R	1.0mA	T _c =25°C
Voltage Rate of Change	dv/dt	1,000 V/μs	Rated V _R
Typical Thermal Resistance, Junction to Case	R _{th(j-c)}	1.5 °C/W	Per diode



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

SBL4545PT

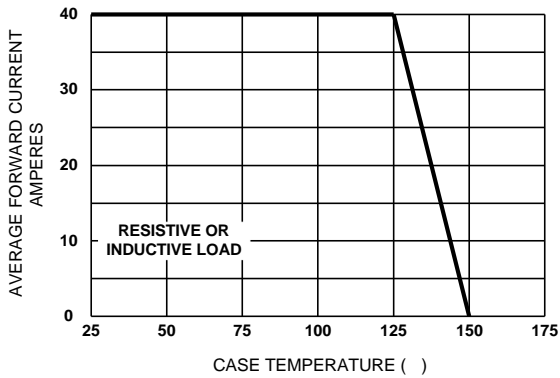


Figure 1. Forward Current Derating Curve

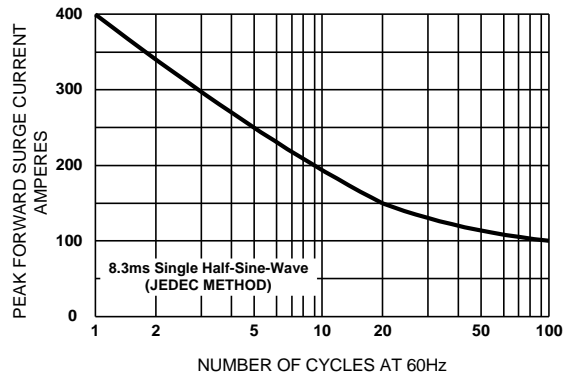


Figure 2. Maximum Non-repetitive Surge Current

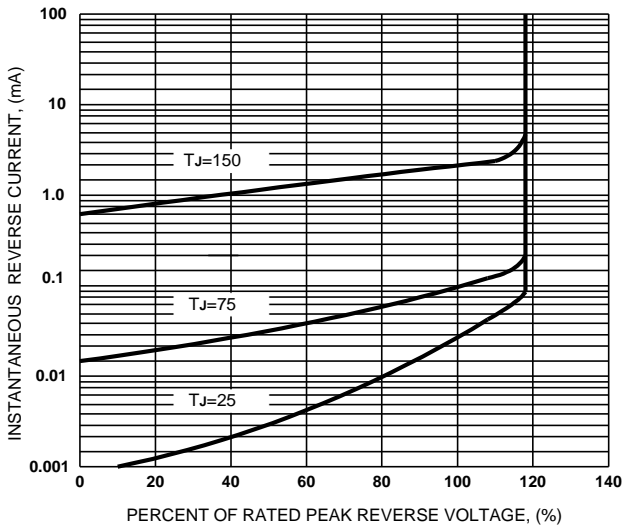


Figure 3. Typical Reverse Characteristics

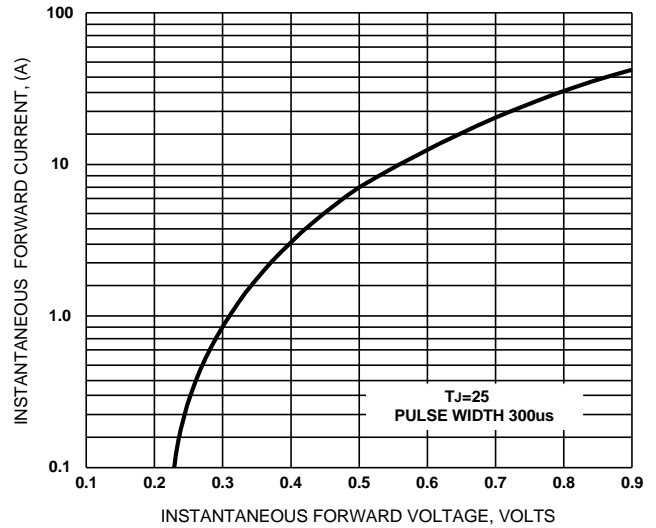


Figure 4. Typical Forward Characteristics

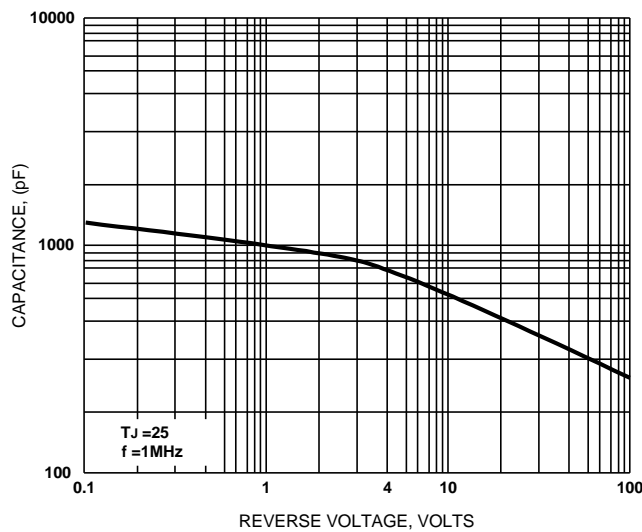


Figure 5. Typical Junction Capacitance