SIRECT ELECTRONIC

SBL4030PT

Power Schottky Rectifier - 40Amp 30Volt

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
-Solar-System Control Box

Absolute maximum ratings

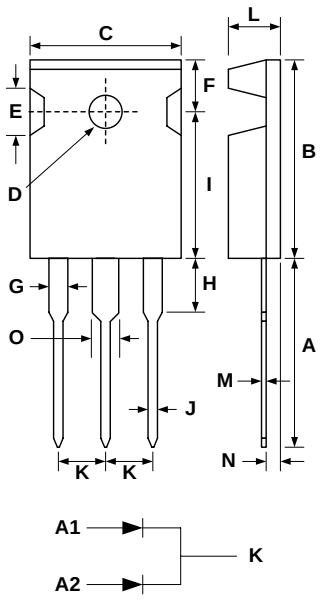
Symbol	Ratings	Unit	Conditions
$I_{F(AV)}$	40	A	Average Forward Current
V_{RRM}	30	V	Repetitive Peak Reverse Voltage
I_{FSM}	400	A	Peak Forward Surge Current
$V_{F(max)}$	0.35	V	Forward Voltage Drop
T_j	-50 to +150	ºC	Operating Temperature
T_{stg}	-50 to +125	ºC	Storage Temperature

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.48V 0.35V	Tc = 25ºC Tc = 125ºC
Maximum Reverse Leakage Current	I_R	1.0mA	Tc = 25ºC
Maximum Voltage Rate of Change	dv/dt	10,000 V/μs	Rated V_R
Typical Thermal Resistance, Junction to Case	$R_{\theta (j-c)}$	1.25 ºC/W	Per diode

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

TO-247AD



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.748	.826	19.00	21.00	
B	.787	.866	20.00	22.00	
C	.598	.638	15.20	16.20	
D	.132	.150	3.35	3.80	
E	.217	.242	5.50	6.15	
F	.209	.232	5.30	5.90	
G	.077	.087	1.95	2.20	
H	.161	.177	4.10	4.50	
I	.551	.610	14.00	15.50	
J	.045	.055	1.15	1.40	
K	.197	.219	5.00	5.55	
L	.189	.205	4.80	5.20	
M	.024	.031	0.60	0.80	
N	.086	.095	2.20	2.40	
O	.116	.128	2.95	3.25	

August 2007 / Rev.5

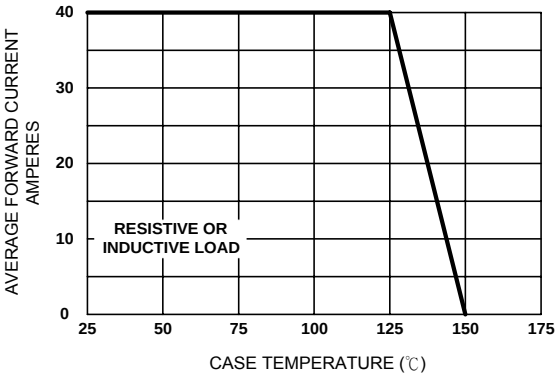


Figure 1. Forward Current Derating Curve

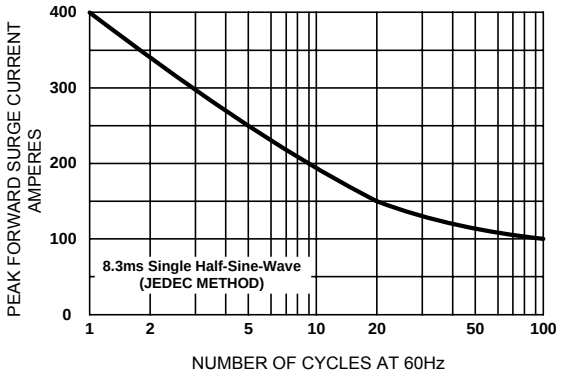


Figure 2. Maximum Non-repetitive Surge Current

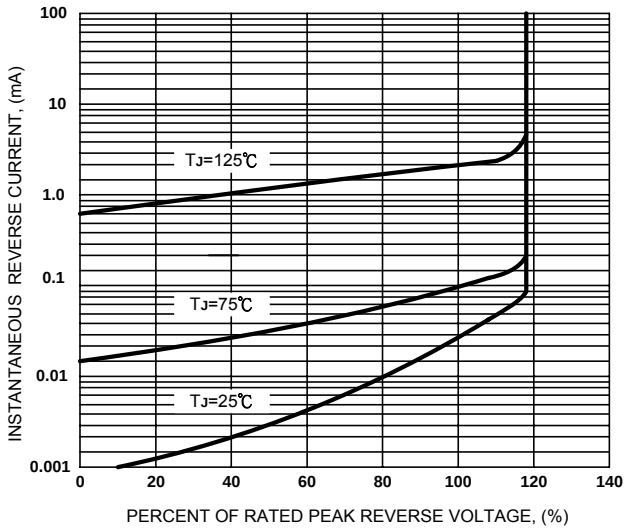


Figure 3. Typical Reverse Characteristics

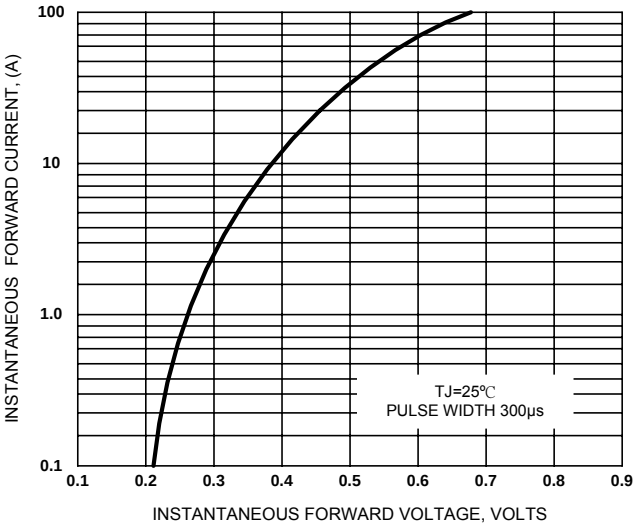


Figure 4. Typical Forward Characteristics

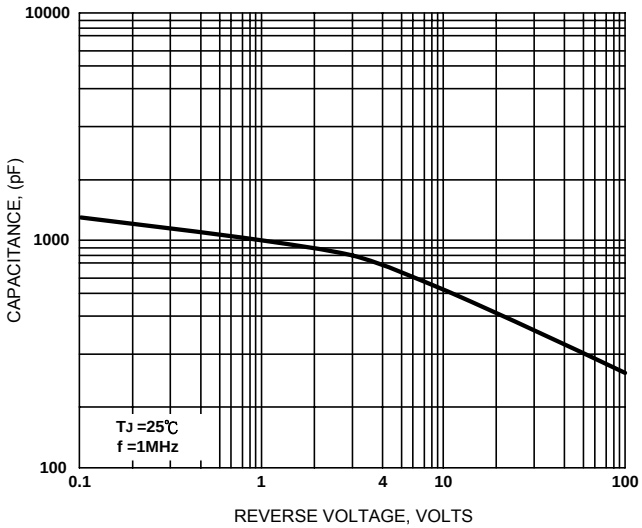


Figure 5. Typical Junction Capacitance