SBR3060

VOLTAGE 60 V
30.0 Amp Schottky Barrier Rectifiers
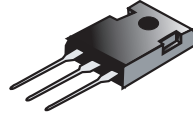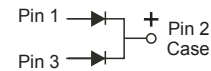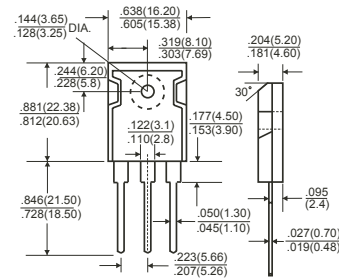
SECOS
Elektronische Bauelemente

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202
     method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 6.1 grams (Approximately)

TO-247 (TO-3P)

.144(3.65) / .128(3.25) DIA.
.638(16.20) / .605(15.38)
.319(8.10) / .303(7.69)
.204(5.20) / .181(4.60)
.244(6.20) / .228(5.8)
30°
.881(22.38) / .812(20.63)
.122(3.1) / .110(2.8)
.177(4.50) / .153(3.90)
.846(21.50) / .728(18.50)
.050(1.30) / .045(1.10)
.095 (2.4)
.027(0.70) / .019(0.48)
.223(5.66) / .207(5.26)

Dimensions in inches (millimeters)

Pin 1 →
Pin 3 →
+ Pin 2
○ Case

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER		SYMBOL	VALUES	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RSM}	60	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current	(Per Leg)	I_F	15	A
	(Per Device)		30	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	180	A
Maximum Instantaneous Forward Voltage (I_F=15 A, T_A=25°C, per leg)		V_F	0.70	V
Maximum Instantaneous Forward Voltage (I_F=15 A, T_A=125°C, per leg)			0.63	
Maximum DC Reverse Current at	T_A = 25°C	I_R	0.5	mA
Rated DC Blocking Voltage	T_A = 100°C		12	
Typical Junction Capacitance (Note 1)		C_J	1700	pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	2.5	°C / W
Voltage Rate of Chance (Rated V_R)		dv / dt	10000	V / μs
Operating Temperature Range		T_J	-50 ~ +150	°C
Storage Temperature Range		T_{STG}	-65 ~ +175	°C

NOTES:
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
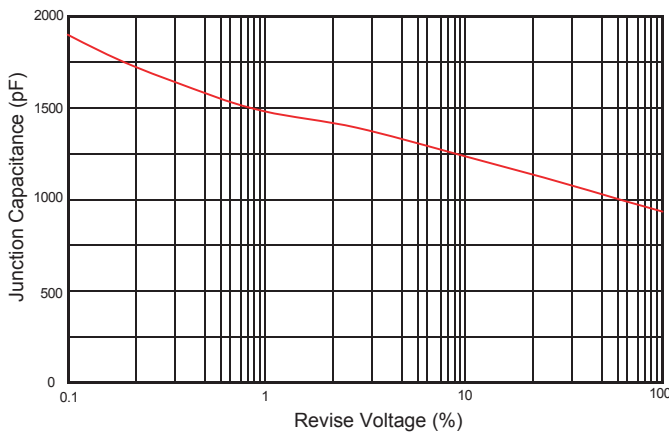2. Thermal Resistance Junction to Case.

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RATINGS AND CHARACTERISTIC CURVES

Typical Forward Current Derating Curve
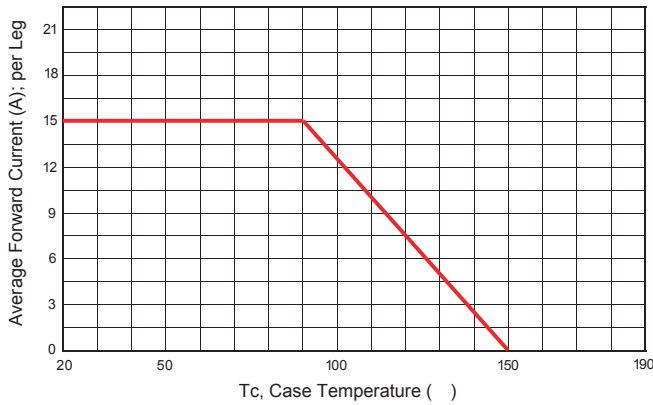
Typical Forward Characteristic

Typical Junction Capacitance
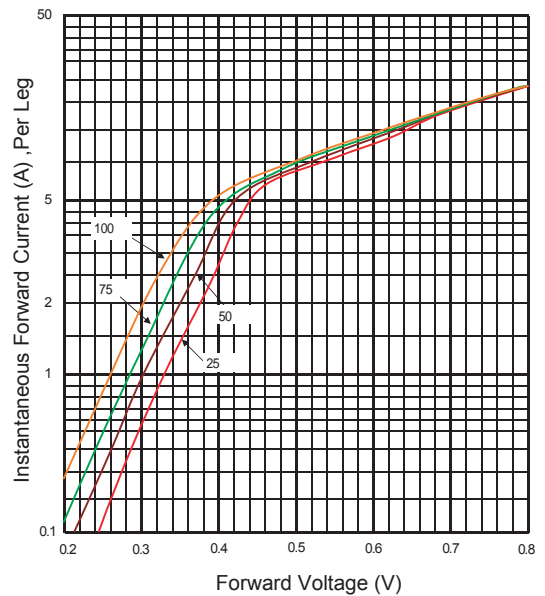
Typical Reverse Characteristic

Maximum Non- Repetitive Forward Surge Current

Tj=25

8.3mS Single half Sine Wave JEDEC Method