Elektronische Bauelemente

SBR40100

VOLTAGE 100 V

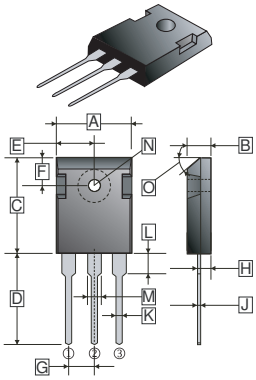
40.0 Amp Schottky Barrier Rectifiers

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

TO-247

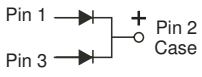
FEATURES

- 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)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	15.38	16.20	H	1.98 REF.	
B	4.20	5.36	J	0.45	0.85
C	20.63	22.38	K	2.80	3.10
D	-	21.50	L	-	4.50
E	7.87	8.13	M	2.92	3.23
F	4.32	7.20	N	3.25 Ø	3.65 Ø
G	5.20	5.70	O	30°	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

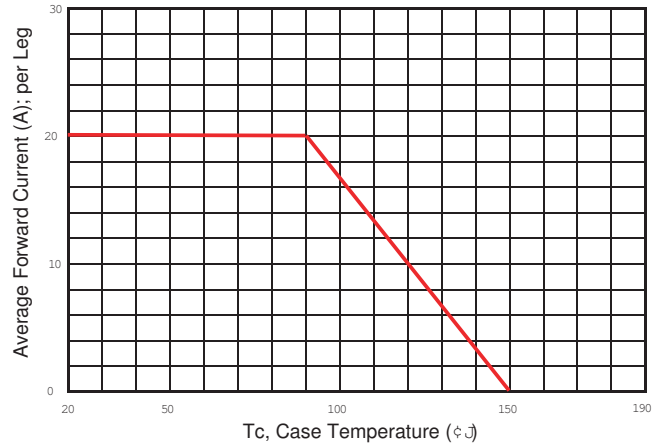
Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER		SYMBOL	VALUES	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RSM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current, See Fig. 1	Per Leg Per Device	I_F	20 40	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	250	A
Maximum Instantaneous Forward Voltage (I_F=20 A, T_A = 25°C, per leg) Maximum Instantaneous Forward Voltage (I_F=20 A, T_A = 125°C, per leg)		V_F	0.87 0.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A = 25°C T_A = 125°C	I_R	0.05 12	mA
Typical Junction Capacitance (Note 1)		C_J	500	pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	2.0	°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

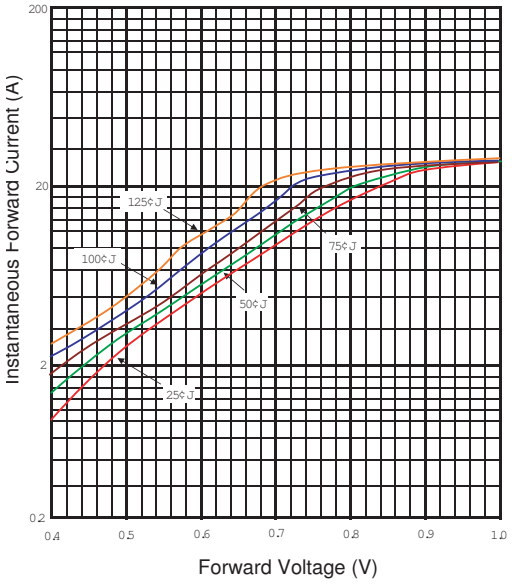
NOTES:
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTIC CURVES

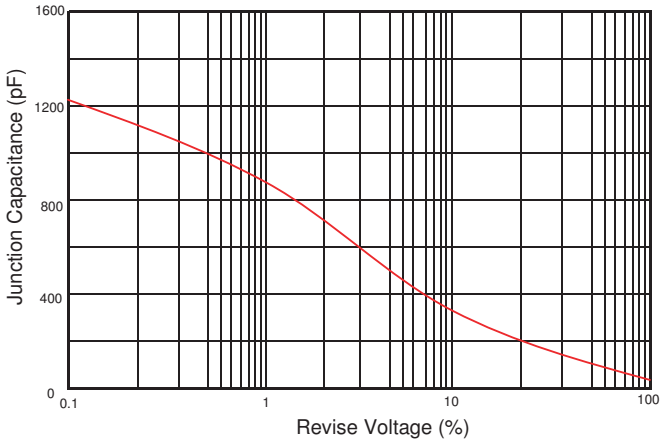
Typical Forward Current Derating Curve



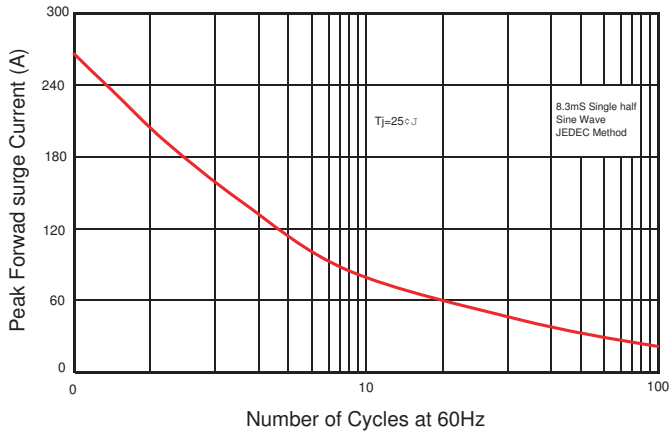
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

