Elektronische Bauelemente

SBR20200F

Voltage 200V

20.0 Amp Schottky Barrier Rectifiers

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

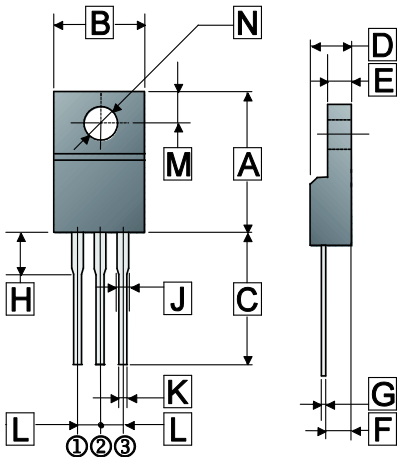
FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Lead Solderable per MIL-STD-202 Method 208 Guaranteed
- Polarity: As Marked
- Mounting Position: Any

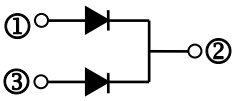
ITO-220



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.40	16.50	H	3.10	4.50
B	9.50	10.72	J	0.80	1.80
C	12.58	14.22	K	0.30	0.95
D	3.90	5.10	L	1.80	2.95
E	2.10	3.56	M	2.15	3.60
F	2.10	3.20	N	ϕ 2.60	ϕ 3.80
G	0.30	0.80			

ORDER INFORMATION

Part Number	Type
SBR20200F	Lead (Pb)-free
SBR20200F-C	Lead (Pb)-free and Halogen-free



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, de-rate current by 20%.)

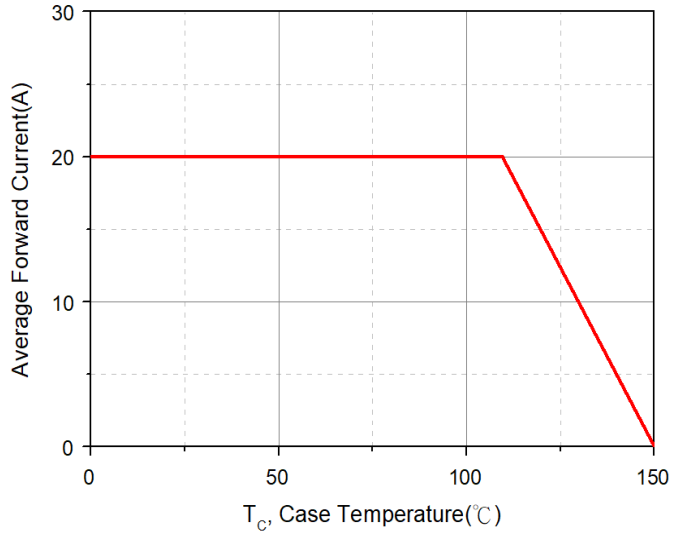
Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RSM}	200	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	I_F	10	A
	Per Device		20	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @I_F=10A	T_A=25°C	V_F	0.92	V
	T_A=125°C		0.8	
Maximum DC Reverse Current at Rated DC Blocking Voltage [4]	T_A= 25°C	I_R	0.02	mA
	T_A= 100°C		5	
Typical Junction Capacitance [1]		C_J	90	pF
Typical Thermal Resistance [3]		$R_{\theta JA}$	15	°C/W
Typical Thermal Resistance [2]		$R_{\theta JC}$	4	
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	

Notes:

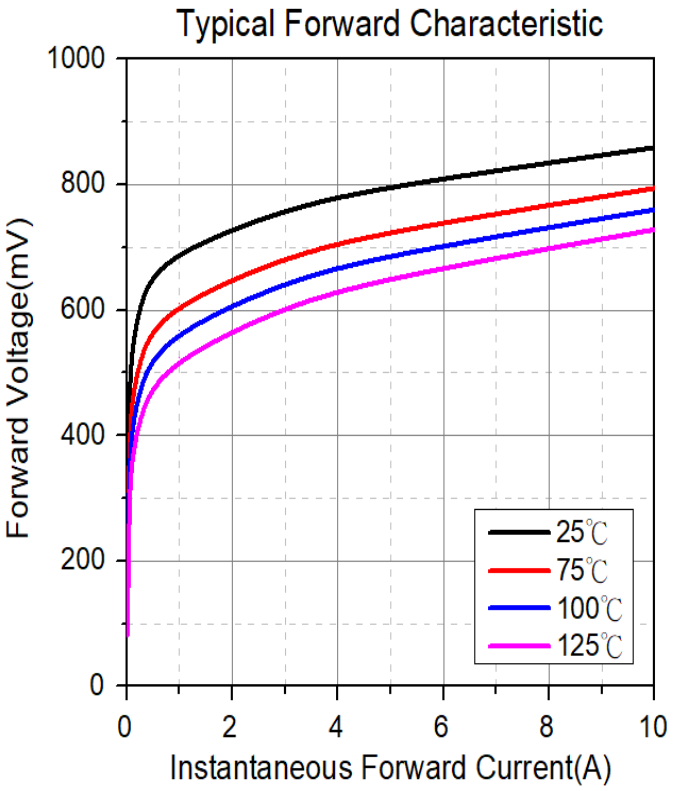
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Thermal Resistance Junction to Case.
3. Thermal Resistance Junction to Ambient.
4. Pulse test: 300uS pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

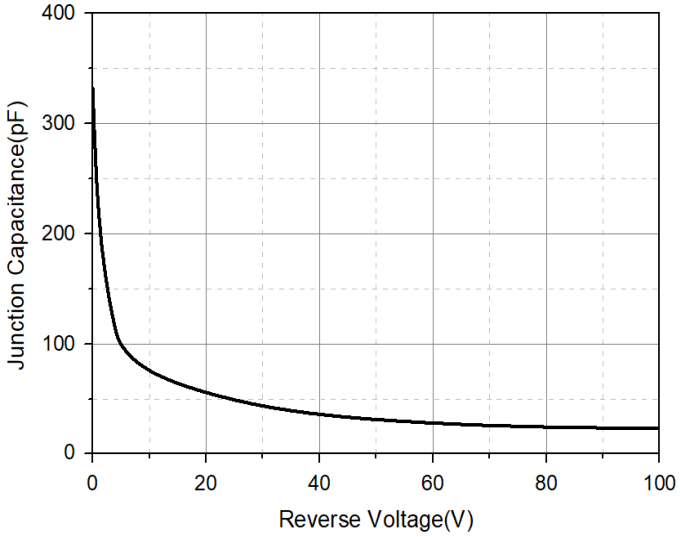
Typical Forward Current Derating Curve



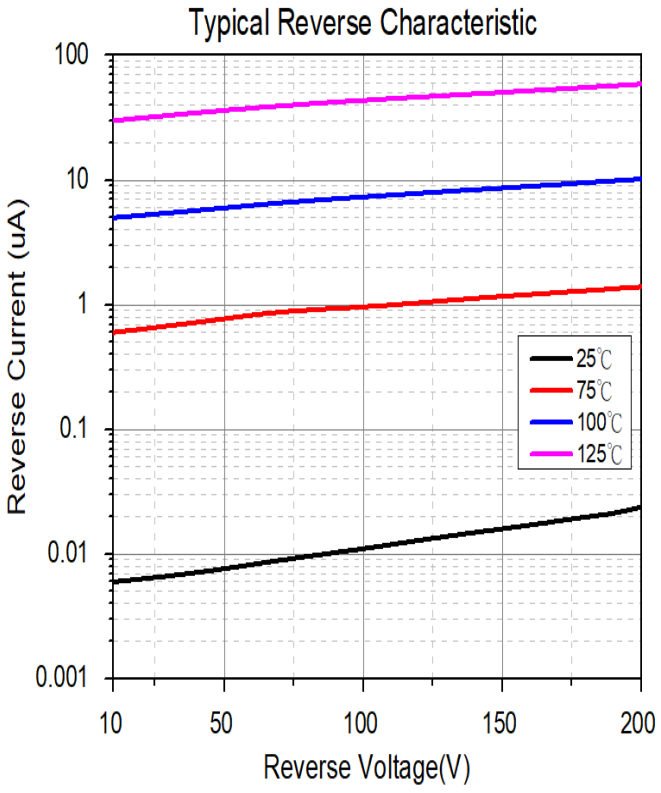
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current