Elektronische Bauelemente

SBR20200

Voltage 200V

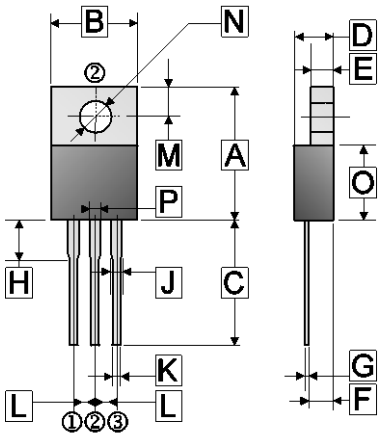
20.0 Amp Schottky Barrier Rectifiers

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

TO-220

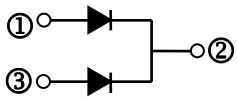


MECHANICAL DATA

- 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

ORDER INFORMATION

Part Number	Type
SBR20200	Lead (Pb)-free
SBR20200-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	0.70	1.78
B	9.57	10.90	K	0.38	1.11
C	12.50	14.75	L	2.01	3.07
D	3.56	5.10	M	2.22	3.43
E	0.51	1.47	N	3.10	4.31
F	2.03	3.19	O	8.10	9.65
G	0.279	0.76	P	1.18 TYP.	
H	2.95	4.5			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

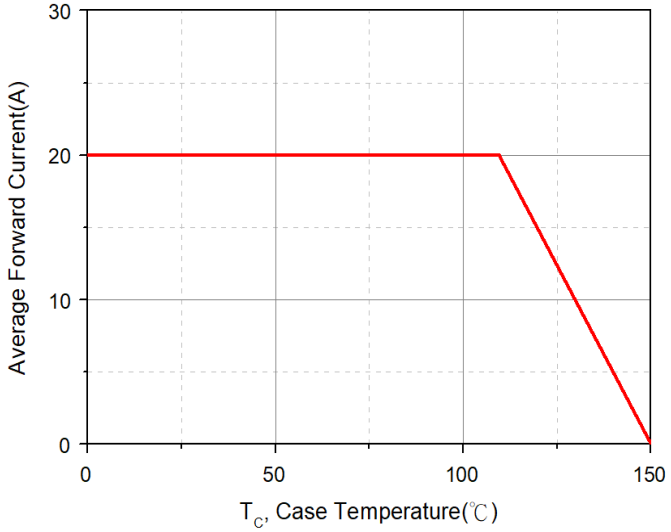
(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

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 [2]	T_A=25°C	I_R	0.02	mA
	T_A=125°C		5	
Typical Junction Capacitance [1]		C_J	190	pF
Typical Thermal Resistance		$R_{\theta JA}$	10	°C/W
		$R_{\theta JC}$	2	
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	

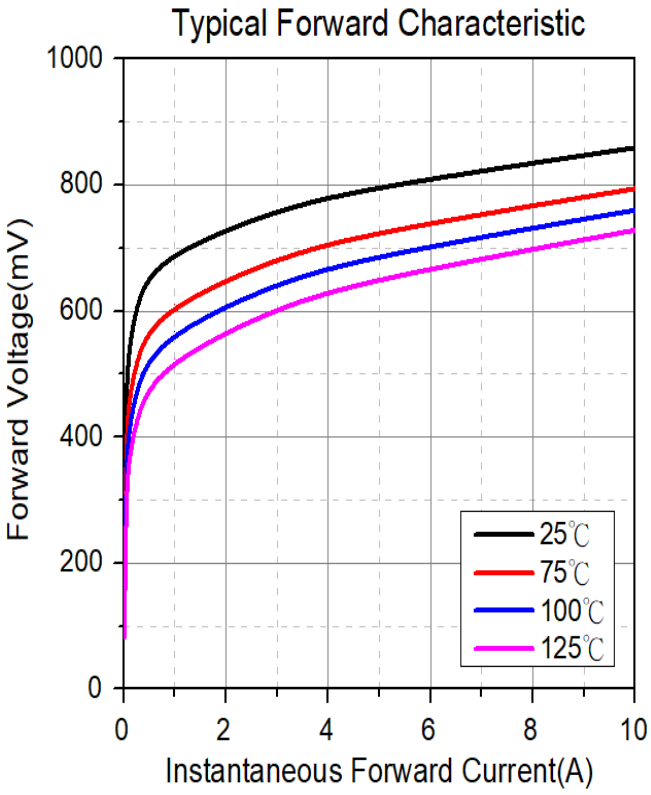
Notes:
1. Measured at 1MHz and applied reverse voltage of 1V D.C.
2. Pulse test: 300uS pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

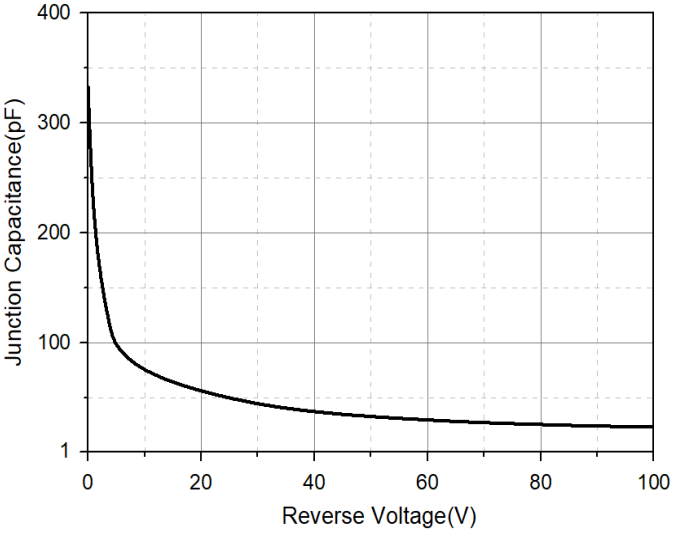
Typical Forward Current Derating Curve



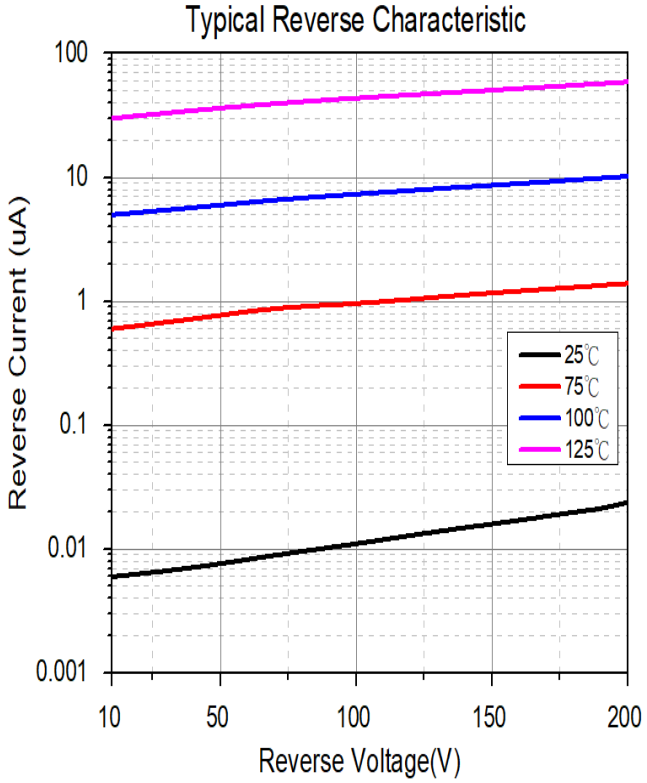
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current