Elektronische Bauelemente

SBL20A200F

Voltage 200V 20.0 Amp

Low VF Planar MOS Barrier Schottky Rectifier

RoHS Compliant Product

A suffix of "-C" specifies halogen free

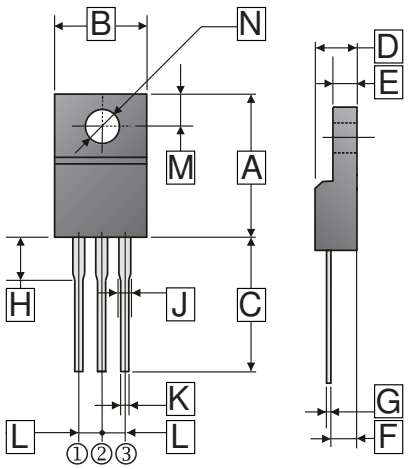
FEATURES

- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Fast Switching Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

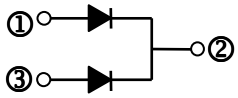
MECHANICAL DATA

- Case: ITO-220
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Epoxy: UL94V-0 Rate Flame Retardant
- Terminals: Matte Tin Finish annealed over Copper Leadframe Solderable per MIL-STD-202, Method 208
- Polarity: As Marked
- Mounting position: Any

ITO-220



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.50	16.50	H	2.70	4.35
B	9.50	10.72	J	0.90	1.70
C	12.60	14.22	K	0.30	0.95
D	4.20	5.10	L	2.34	2.75
E	2.30	3.30	M	2.40	3.60
F	2.30	3.10	N	ϕ 3.0	ϕ 3.8
G	0.30	0.75			



ORDER INFORMATION

Part Number	Type
SBL20A200F	Lead (Pb)-free
SBL20A200F-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	200	V
Maximum RMS Voltage		V_{RMS}	140	V
Maximum Average Forward Rectified Current	(Per Leg)	I_F	10	A
	(Per Device)		20	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	200	A
Typical Thermal Resistance		$R_{\theta JC}$	4	℃ /W
Operating and Storage Temperature Range		T_J,T_{STG}	-55~150	℃

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Instantaneous Forward Voltage	V_F	0.71	-	V	I_F=3A, T_J=25℃
		0.76	-		I_F=5A, T_J=25℃
		0.92	0.96		I_F=10A, T_J=25℃
		0.71	-		I_F=10A, T_J=125℃
Reverse Current	I_R	1	-	uA	V_R=140V, T_J=25℃
		-	50		V_R=200V, T_J=25℃
		4	-	mA	V_R=200V, T_J=125℃
Typical Junction Capacitance [1]	C_J	210	-	pF	

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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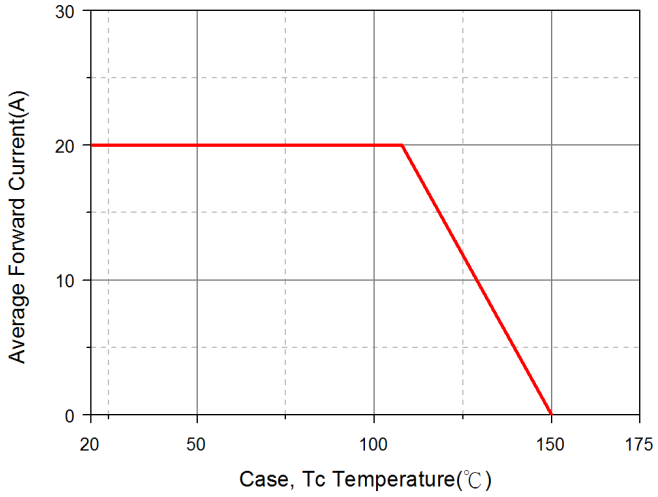
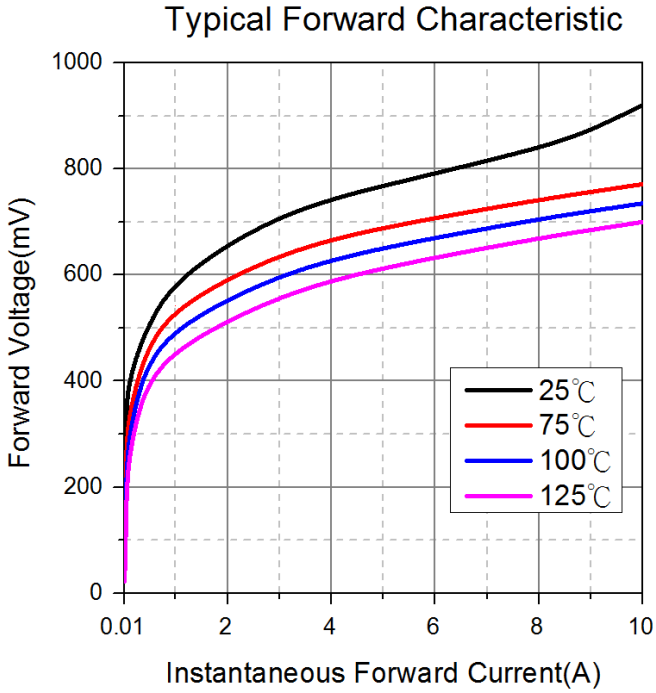
RATINGS AND CHARACTERISTIC CURVES

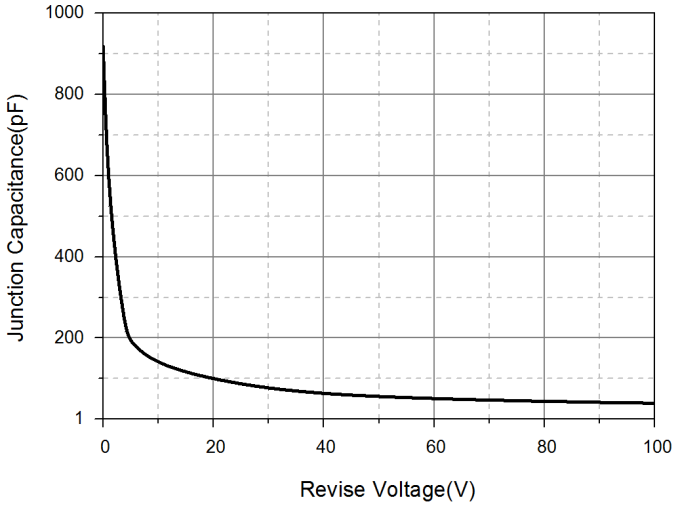
Typical Forward Current Derating Curve



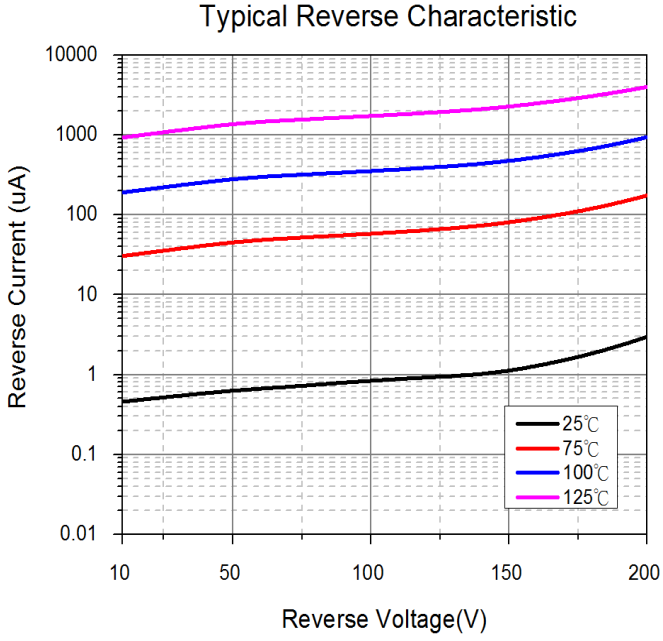
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current