Elektronische Bauelemente

SBL20A100F

Voltage 100V

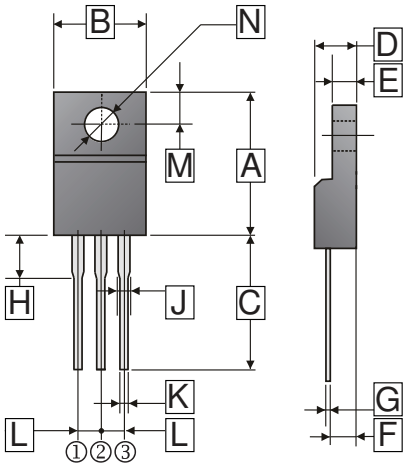
20.0 Amp Low V_F Trench Barrier Schottky Rectifier

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

FEATURES

- Trench Barrier Schottky technology
- Low forward voltage drop
- Low reverse current
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

ITO-220



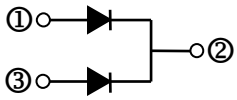
MECHANICAL DATA

- 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

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.60	15.70	H	2.70	4.00
B	9.50	10.50	J	0.90	1.50
C	12.60	14.00	K	0.50	0.90
D	4.30	4.70	L	2.34	2.74
E	2.30	3.2	M	2.40	3.00
F	2.30	2.90	N	ϕ 3.0	ϕ 3.4
G	0.30	0.75			

ORDER INFORMATION

Part Number	Type
SBL20A100F	Lead (Pb)-free
SBL20A100F-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25℃ ambient temperature unless otherwise s pecified. 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}	100	V
Working Peak Reverse Voltage		V_{RSM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	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}	120	A
Voltage Rate of Chance (Rated V_R)		dv/dt	10000	V/μs
Typical Thermal Resistance		$R_{\theta JC}$	4	℃/W
Operating and Storage Temperature Range		T_J,T_{STG}	-40~150	℃

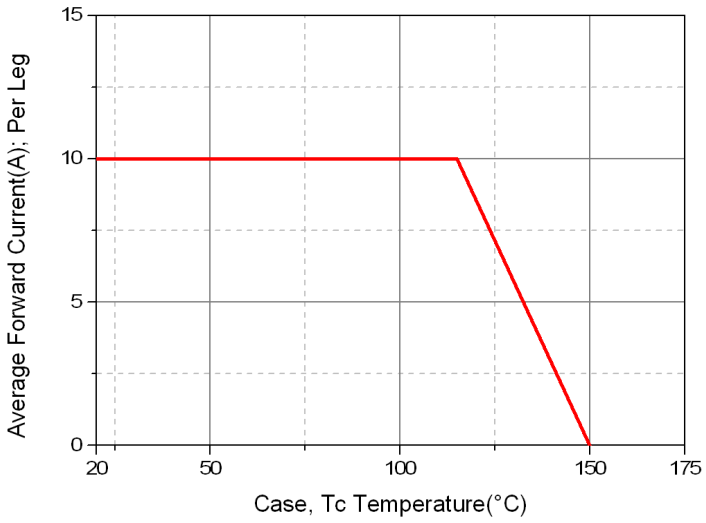
ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.57	0.64	V	I_F=3A, T_J=25℃
		0.69	0.74		I_F=5A, T_J=25℃
		0.79	0.84		I_F=10A, T_J=25℃
		0.7	-		I_F=10A, T_J=125℃
Maximum DC Reverse Current at Rated DC Blocking Voltage [2]	I_R	-	0.2	mA	T_J=25℃
		-	10		T_J=100℃
Typical Junction Capacitance [1]	C_J	160	-	pF	

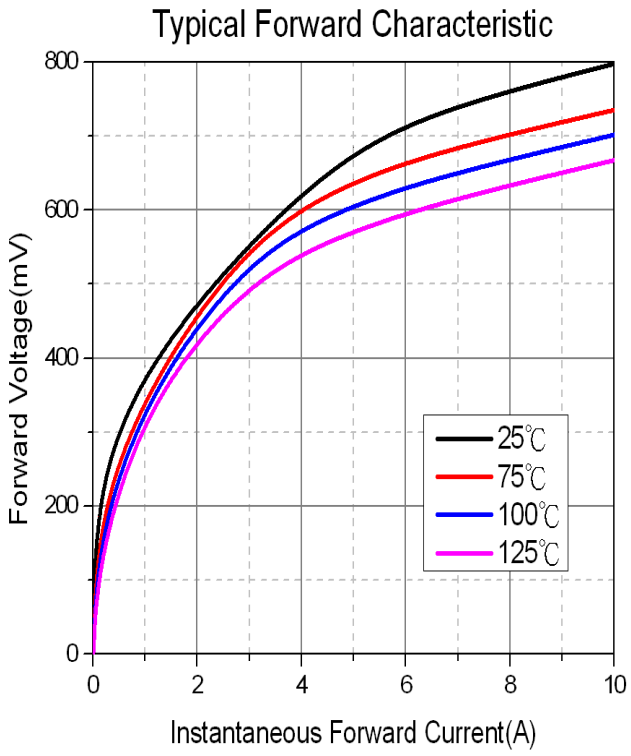
Notes:
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300μs, Duty Cycle≦2%.

RATINGS AND CHARACTERISTIC CURVES

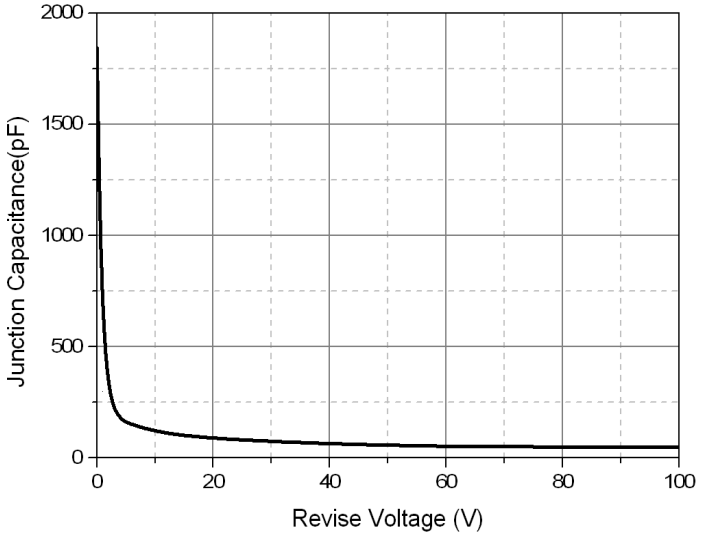
Typical Forward Current Derating Curve



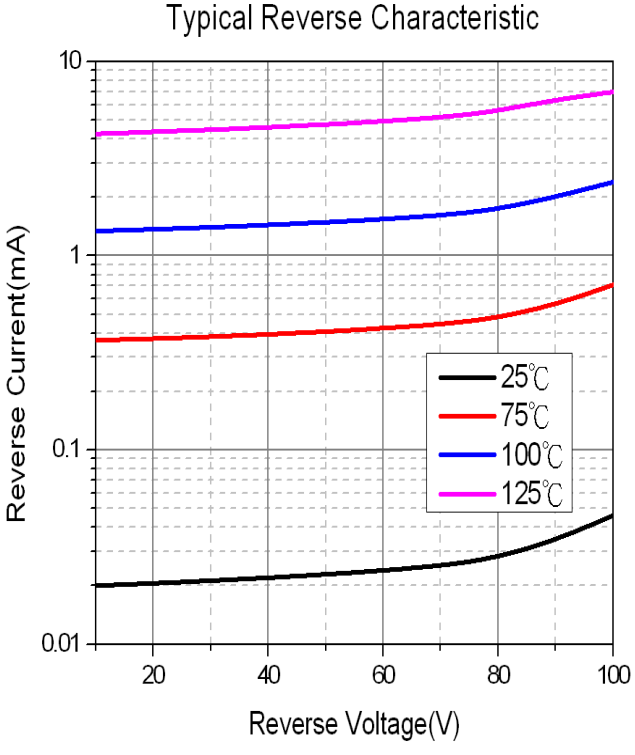
Typical Forward Characteristic



Typical Junction Capacitance(pF)



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current