Elektronische Bauelemente

SBH20U150F

Voltage 150V, 20A

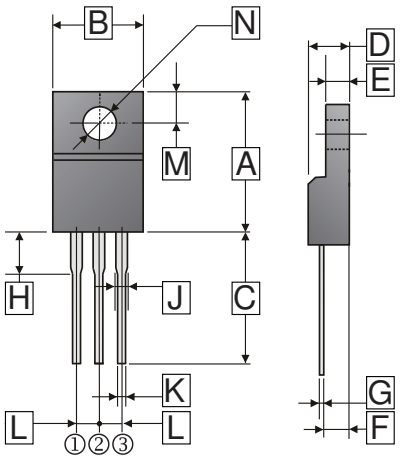
Low V_F & Low I_R Trench Barrier Schottky Rectifier

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

FEATURES

- Trench Barrier Schottky Technology
- Low Forward Voltage Drop, Low Power Losses
- Low Reverse Current
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction

ITO-220

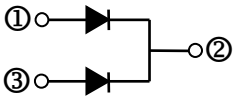


MECHANICAL DATA

- 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

ORDER INFORMATION

Part Number	Type
SBH20U150F	Lead (Pb)-free
SBH20U150F-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.60	16.50	H	2.70	4.00
B	9.50	10.50	J	0.90	1.50
C	12.60	14.00	K	0.50	0.95
D	4.30	5.10	L	2.34	2.74
E	2.30	3.2	M	2.40	3.60
F	2.30	3.10	N	ϕ 3.0	ϕ 3.4
G	0.30	0.75			

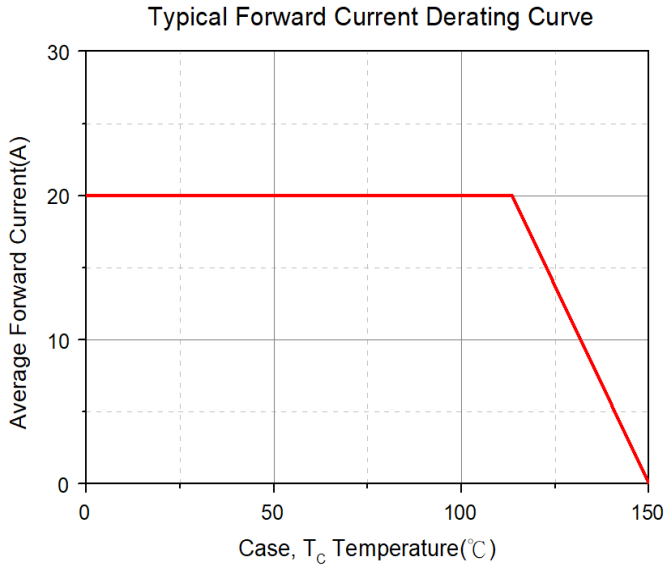
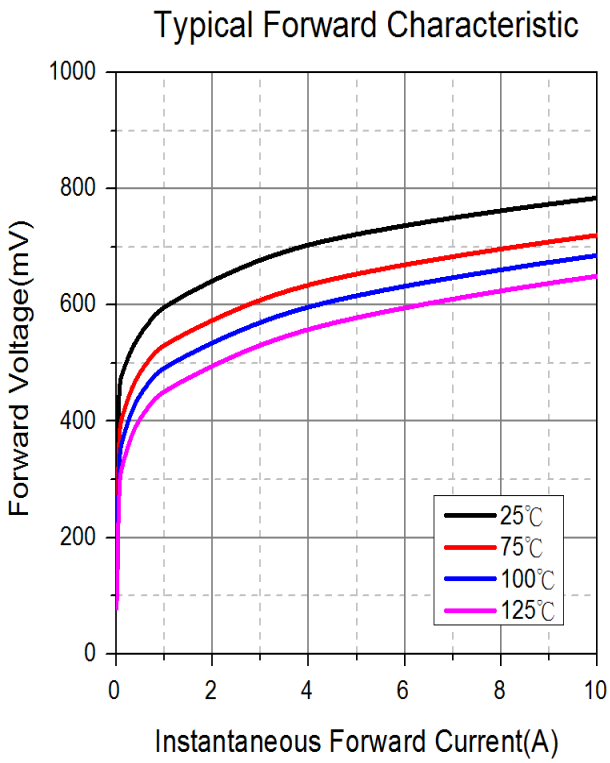
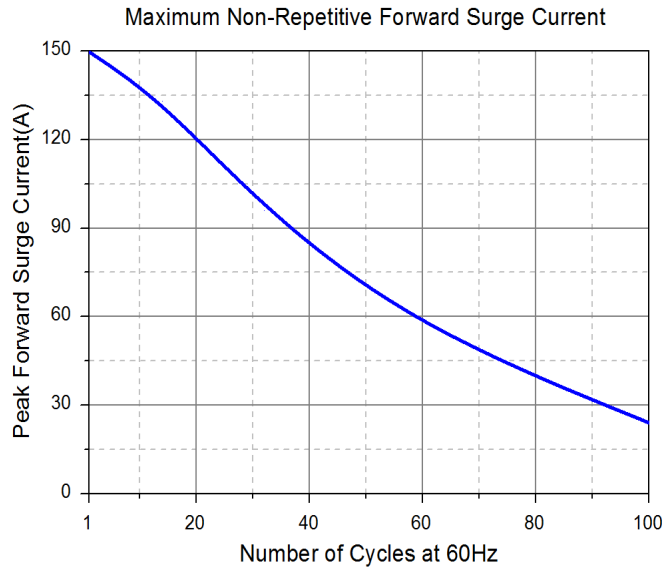
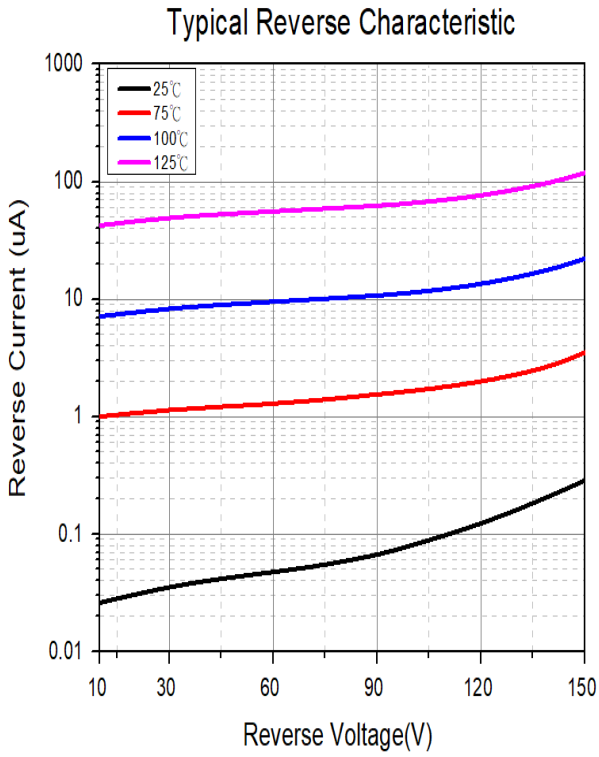
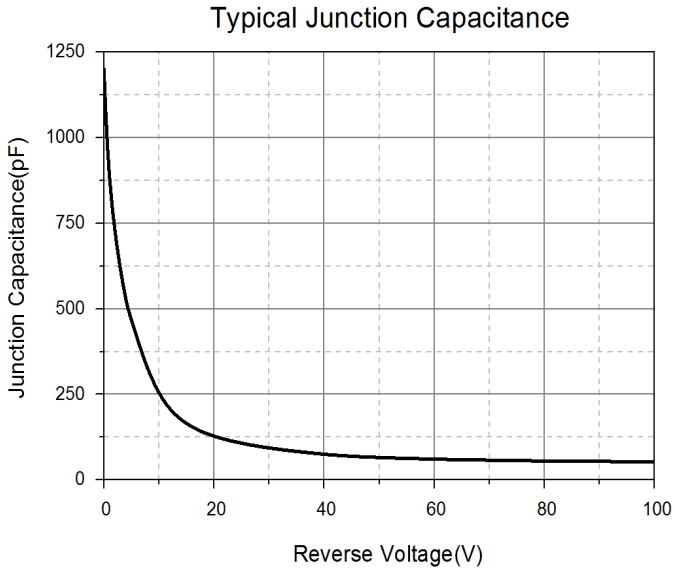
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(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	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	150	V
Working Peak Reverse Voltage		V_{RSM}	150	V
Maximum DC Blocking Voltage		V_{DC}	150	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}	150	A
Typical Thermal Resistance		$R_{\theta JC}$	4	℃/W
Operating Junction & Storage Temperature Range		T_J,T_{STG}	-40~150	℃

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Conditions
Maximum Instantaneous Forward Voltage	V_F	0.68	0.73	V	I_F=3A, T_J=25℃
		0.78	0.83		I_F=10A, T_J=25℃
		0.65	-		I_F=10A, T_J=125℃
Maximum DC Reverse Current [2] @Rated DC Blocking Voltage	I_R	0.3	10	μA	T_J=25℃
		0.02	2	mA	T_J=100℃
Typical Junction Capacitance [1]	C_J	470	-	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