Elektronische Bauelemente

SBR40150RF

VOLTAGE 150V

40.0 Amp Schottky Barrier Rectifiers

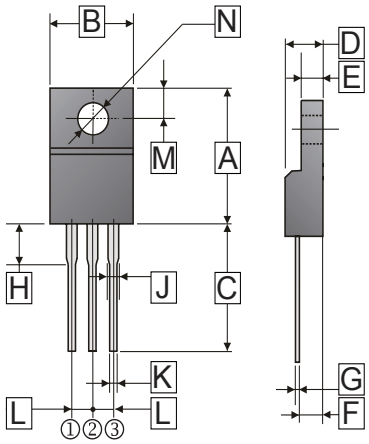
RoHS Compliant Product

A suffix of "-C" specifies halogen free

FEATURES

- Low forward voltage drop
- Low reverse current
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

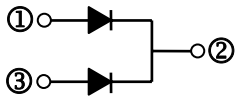
ITO-220



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.60	15.70	H	2.70	3.80
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	2.80	N	ϕ3.0	ϕ3.4
G	0.30	0.70			

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
- Weight: 1.98 g (Approximate)



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}	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	20	A
	(Per Device)		40	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	300	A
Maximum Instantaneous Forward Voltage	(I_F = 20 A, T_J = 25°C, per leg)	V_F	0.86	V
	(I_F = 20 A, T_J = 100°C, per leg)		0.73	
Maximum DC Reverse Current at Rated DC Blocking Voltage [3]	T_J=25°C	I_R	0.1	mA
	T_J=100°C		2	
Typical Junction Capacitance [1]		C_J	370	pF
Typical Thermal Resistance [2]		$R_{\theta JC}$	4.0	°C /W
Voltage Rate of Chance (Rated V_R)		dv/dt	10000	V / μs
Operating Temperature Range		T_J	-50 ~ 175	°C
Storage Temperature Range		T_{STG}	-50 ~ 150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse Test：Pulse Width = 300 μs, Duty Cycle ≦ 2.0%.

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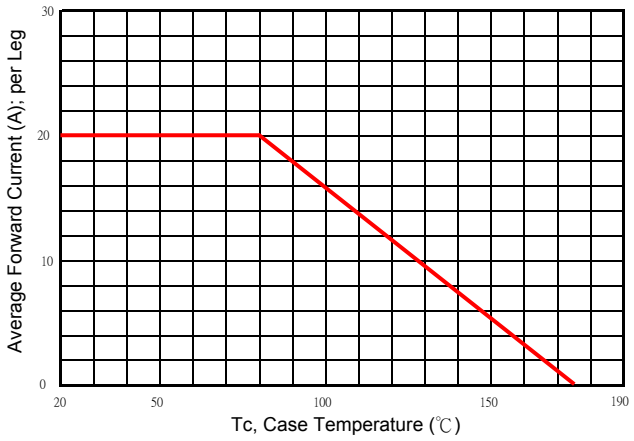
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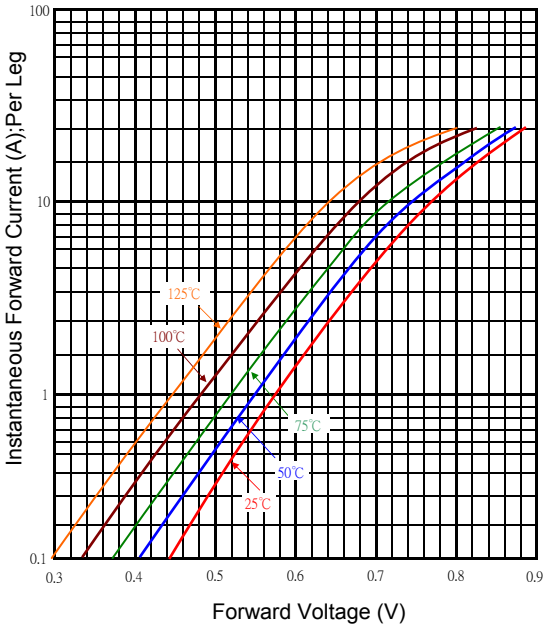
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RATINGS AND CHARACTERISTIC CURVES

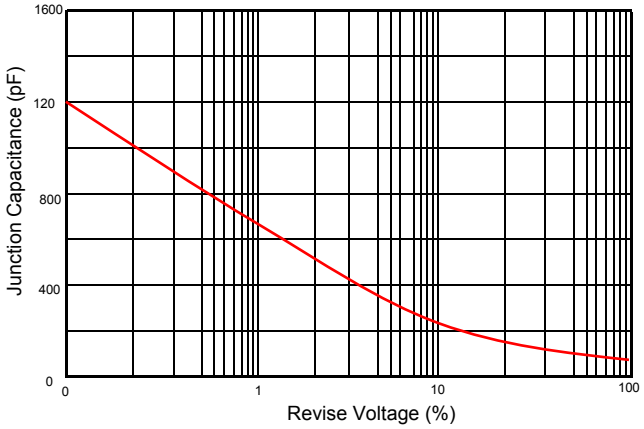
Typical Forward Current Derating Curve



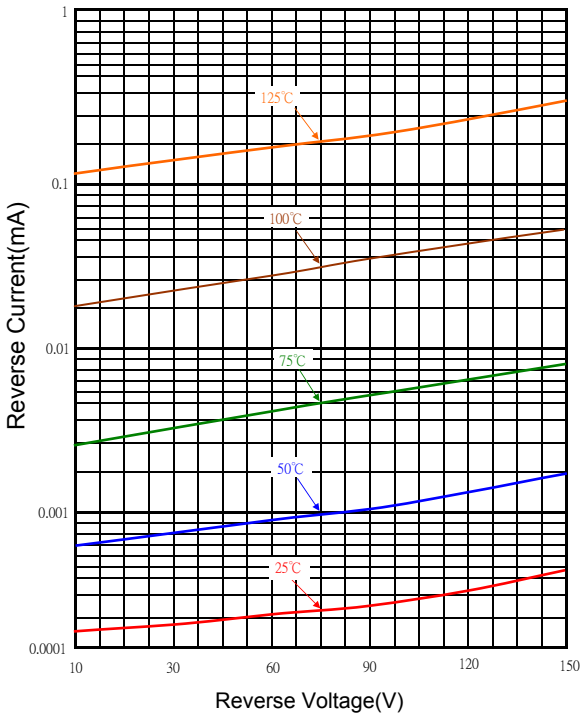
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

