Elektronische Bauelemente

MBR20200

Voltage 200 V

20.0 Amp Schottky Barrier Rectifiers

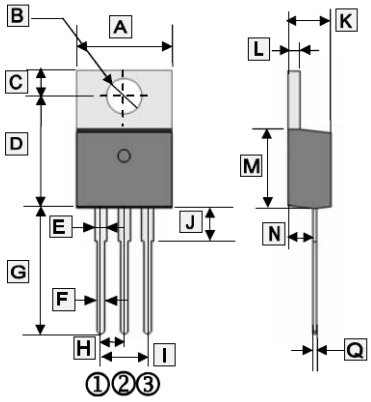
RoHS Compliant Product

A suffix of “-C” specifies halogen free

FEATURES

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

TO-220J



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	10.010	10.350	I	4.980	5.180
B	3.735	3.935	J	3.560	3.960
C	2.590	2.890	K	4.470	4.670
D	12.060	12.460	L	1.200	1.400
E	1.170	1.370	M	8.500	8.900
F	0.710	0.910	N	2.520	2.820
G	13.400	13.800	Q	0.330	0.650
H	2.540 TYP.				

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

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}	200	V
Working Peak Reverse Voltage		V_{RWM}	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, 8.3 ms single half sine-wave		I_{FSM}	150	A
Power dissipation		P_D	2	W
Typical Thermal Resistance		$R_{\theta JA}$	50	℃ /W
Operating and Storage Temperature Range		T_J,T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS

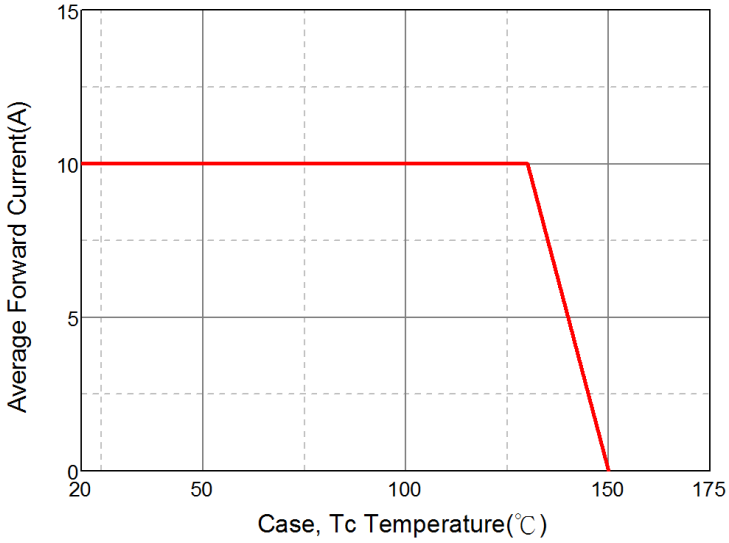
Parameter		Symbol	MIN.	Typ.	Max.	Unit	Test Condition
Reverse voltage		V_{BR}	200	-	-	V	
Maximum Instantaneous Forward Voltage		V_F	-	-	0.92	V	I_F=10A, T_J =25℃
Maximum DC Reverse Current at Rated DC Blocking Voltage [2]	T_J =25℃	I_R	-	-	0.1	mA	V_R=200V
	T_J =100℃		-	-	10		
Typical Junction Capacitance [1]		C_J	-	75	-	pF	

NOTES:

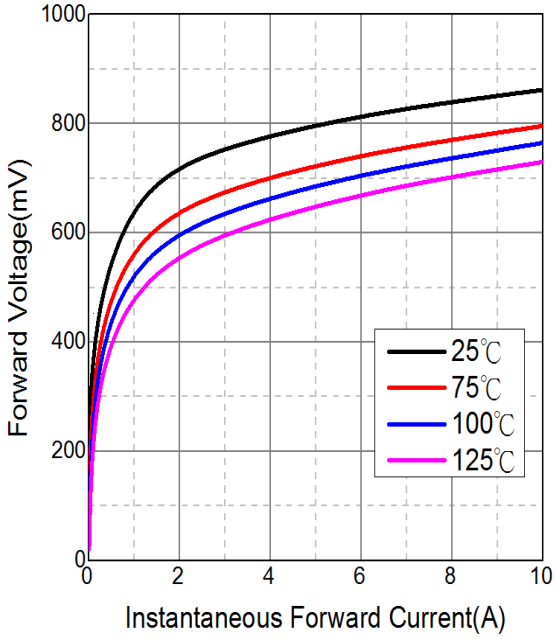
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test：Pulse Width = 300 μs, Duty Cycle ≦ 2.0%.

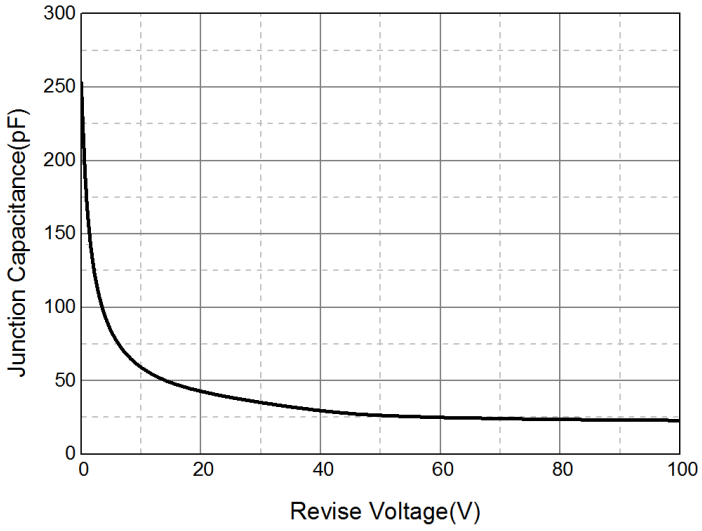
RATINGS AND CHARACTERISTIC CURVES

Typical Forward Current Derating Curve

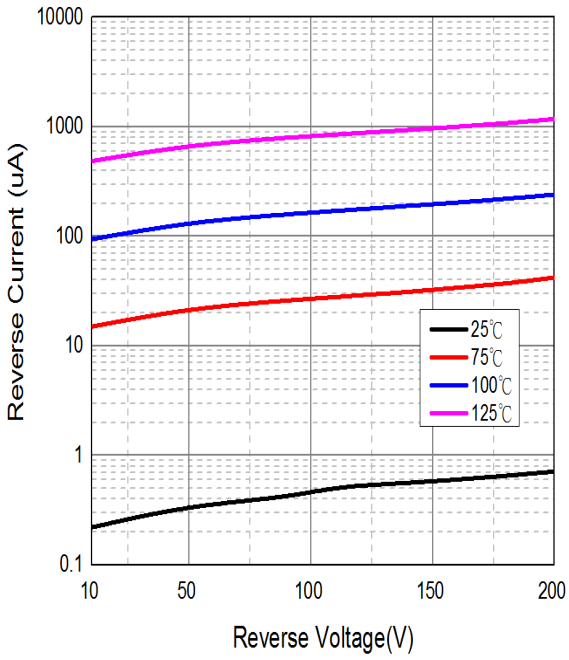


Typical Forward Characteristic





Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current