Elektronische Bauelemente

MBR30L60F

Voltage 60V

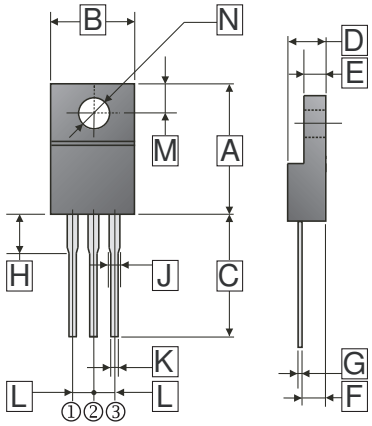
30.0 Amp Schottky Barrier Rectifier

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

FEATURES

- Metal Silicon Junction and Majority Carrier Conduction
- Low Power Loss
- High Efficiency
- High Current Capability

ITO-220J



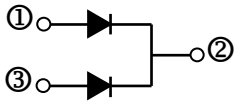
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.50	15.50	H	3.80 TYP.	
B	9.50	10.50	J	1.30 REF.	
C	13.20 REF.		K	0.30	0.90
D	4.24	4.84	L	2.54 REF.	
E	2.52	3.20	M	2.70 REF.	
F	2.50	2.90	N	ϕ 3.50 REF.	
G	0.47	0.75			

MECHANICAL DATA

- Case: ITO-220J Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: As Marked
- Mounting Position: Any

ORDER INFORMATION

Part Number	Type
MBR30L60F	Lead (Pb)-free
MBR30L60F-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%.)

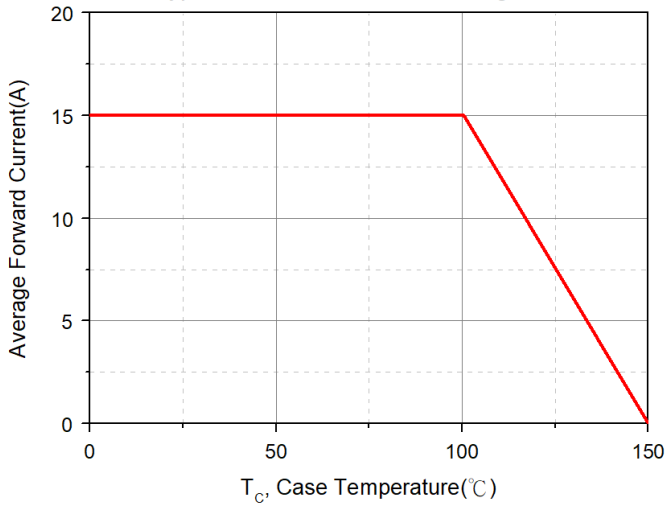
Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RSM}	60	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current	Per Leg	I_F	15	A
	Per Device		30	
Peak Forward Surge Current, 8.3ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	200	A
Maximum Instantaneous Forward Voltage @I_F=15A	T_J=25℃	V_F	0.75	V
	T_J=125℃		0.65	
Maximum DC Reverse Current @Rated DC Blocking Voltage [2]	T_J=25℃	I_R	0.2	mA
	T_J=75℃		10	
Typical Junction Capacitance [1]		C_J	625	pF
Single Pulse Reverse Avalanche Energy	T_J=25℃, L=15mH	E_{AS}	270	mJ
	T_J=100℃, L=15mH		67.5	
Single Pulse Reverse Avalanche Current	T_J=25℃, L=15mH	I_{Pr}	6	A
	T_J=100℃, L=15mH		3	
Typical Thermal Resistance Junction-Case		$R_{\theta JC}$	4	℃/W
Operating Junction & Storage Temperature Range		T_J, T_{STG}	-55~150	℃

Notes:

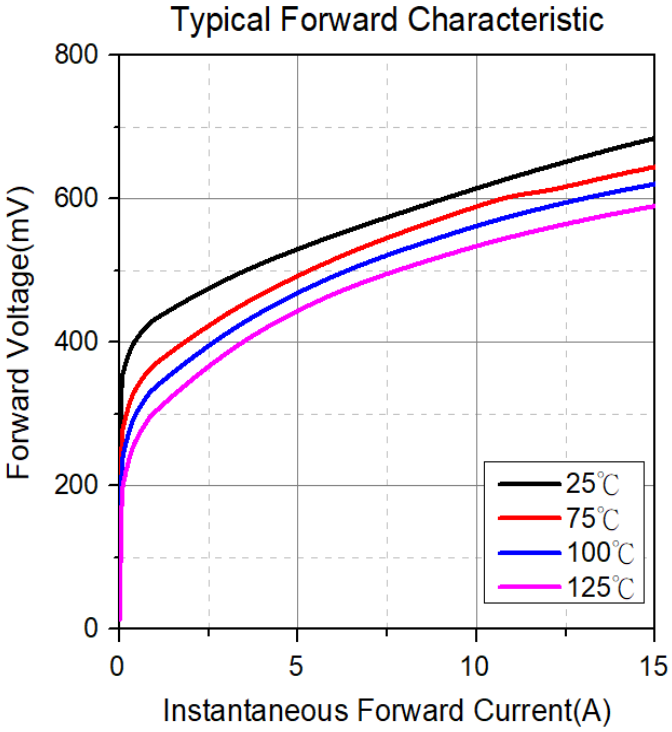
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300μs, Duty Cycle≦2%.

CHARACTERISTIC CURVES

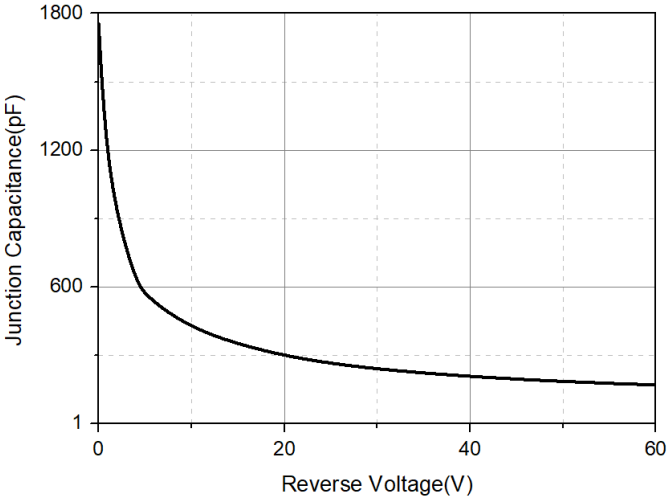
Typical Forward Current Derating Curve



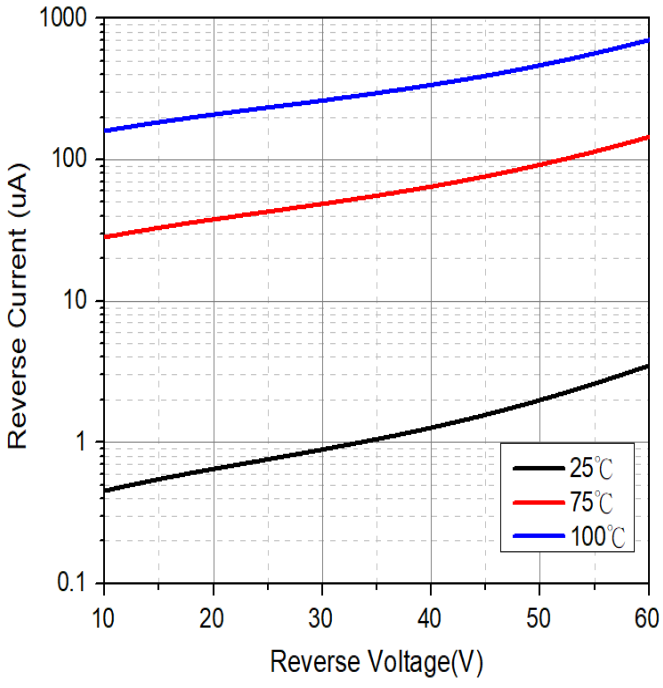
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current