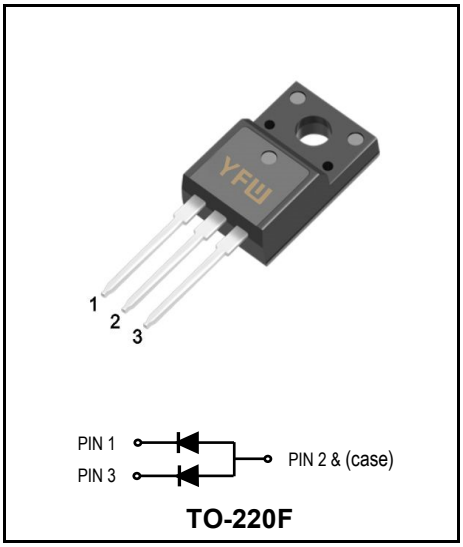
Schottky Barrier Rectifiers

Reverse Voltage - 200V

Forward Current - 20A



TO-220F

FEATURES

- High current capability
- Low forward voltage drop
- Low power loss,high efficiency
- High surge capability
- High temperature soldering guaranteed

MECHANICAL DATA

- Case:TO-220F
- RoHS compliant
- Case Material: “Green" molding compound, UL
- flammability classification 94V-0,“Halogen-free"".

Maximum Ratings And Electrical Characteristics

Ratings At 25℃ Ambient Temperature Unless Otherwise Specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current (Per leg / Per device)	$I_{F(AV)}$	10 / 20	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}	150	A
Typical thermal resistance	$R_{\theta JC}$	2	°C/W
Typical Junction Capacitance (1)	C_j	147	pF
Operating Temperature Range	T_J	-55 ~ +175	°C
Storage Temperature Range	T_{STG}	-55 ~ +175	°C

Parameter	Test Conditions	Symbols	Min	Typ	Max	Units
Breakdown voltage per leg	I_R =0.1mA	V_{BR}	200	-	-	V
Instantaneous forward voltage per leg	I_F =10A,T_J=25℃	V_F	-	0.85	0.92	V
Reverse current per leg	V_R=200V,T_J=25℃	I_R	-	-	10	uA

（1）Measured at 1 MHz and applied reverse voltage of 4 V D.C

Fig.1 Typical Forward Current Derating Curve

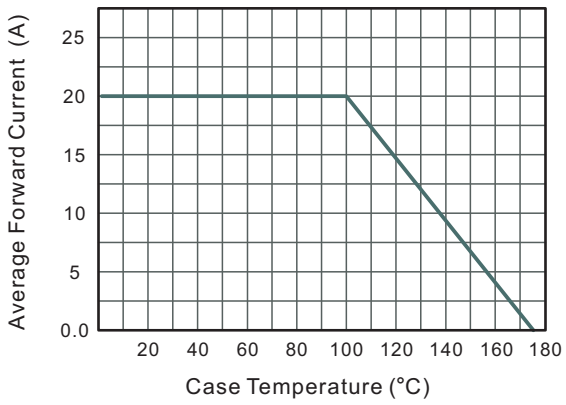


Fig.2 Typical Reverse Characteristics

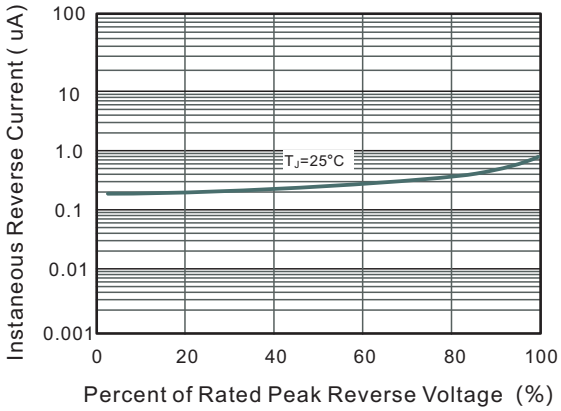


Fig.3 Typical Forward Characteristic(per leg)

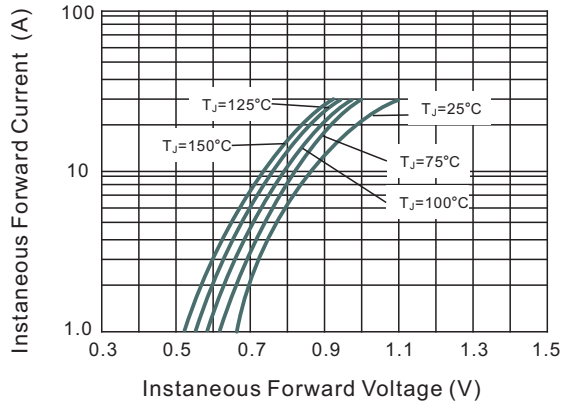


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current

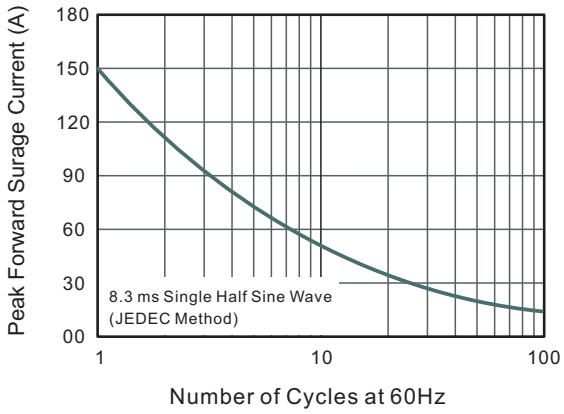
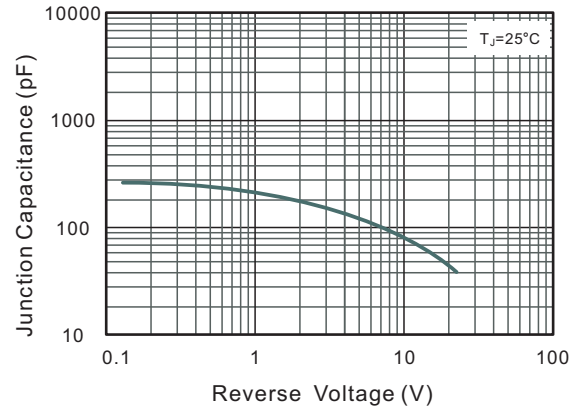
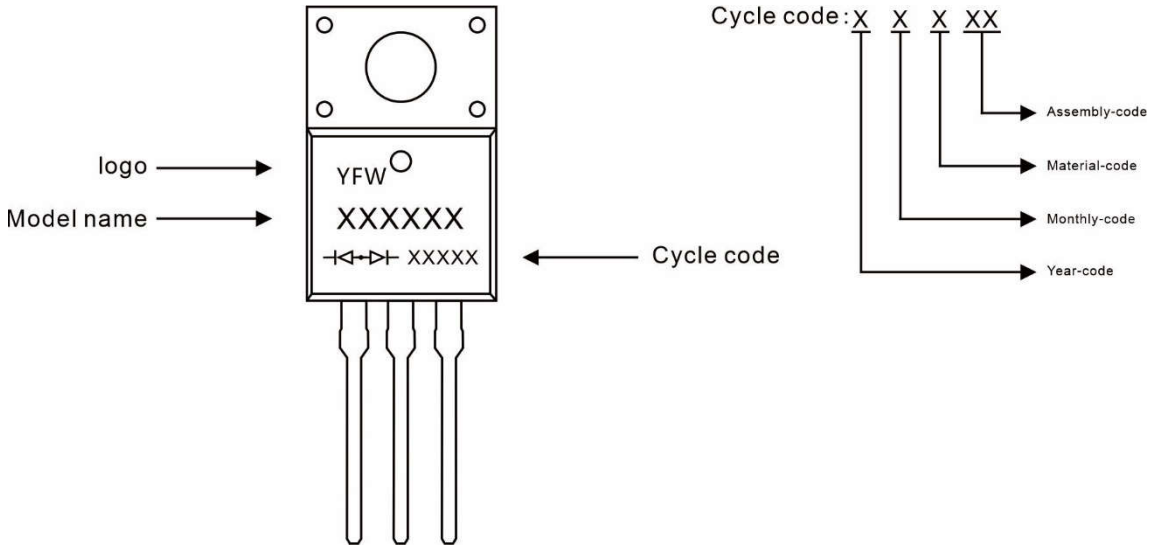


Fig.5 Typical Junction Capacitance



Marking Diagram

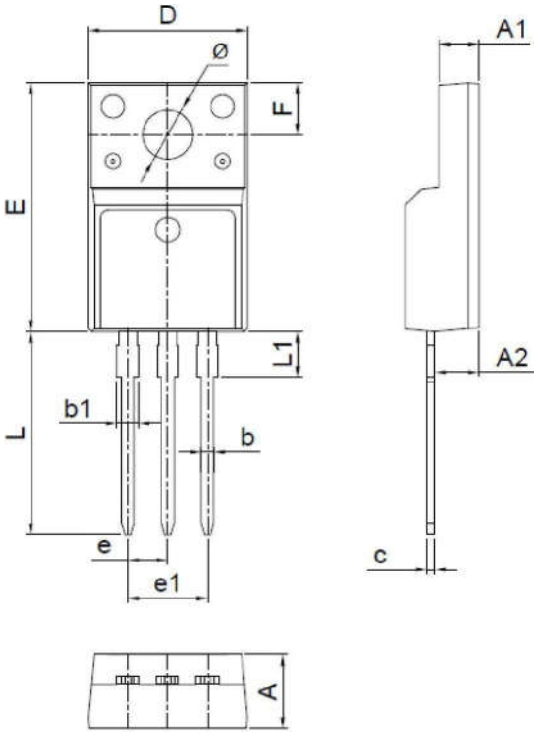


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MBR20200FCTR	TO-220F	0.06oz(1.74g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

Package Dimensions

TO-220F



Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.66	2.86	0.105	0.113
b	0.75	0.85	0.030	0.033
b1	1.24	1.44	0.049	0.057
c	0.40	0.60	0.016	0.024
D	10.00	10.32	0.394	0.406
E	15.75	16.05	0.620	0.632
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	13.50	13.90	0.531	0.547
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130

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