

**Schottky Barrier Rectifiers**

**Reverse Voltage - 40V TO 200V**

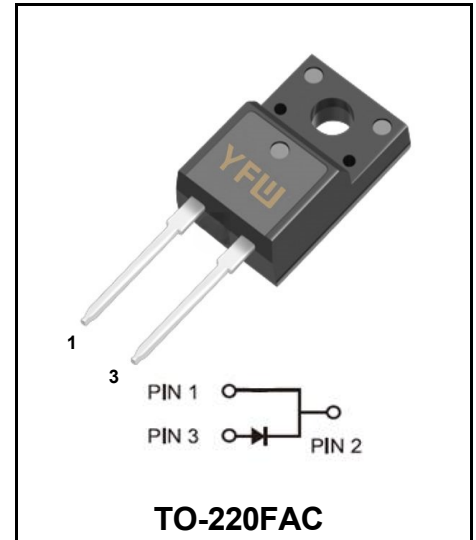
**Forward Current - 20A**

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed  
250°C/10 seconds at terminals

**MECHANICAL DATA**

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any



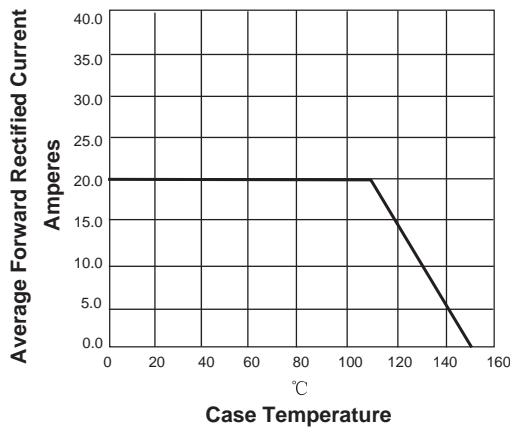
**Maximum Ratings And Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

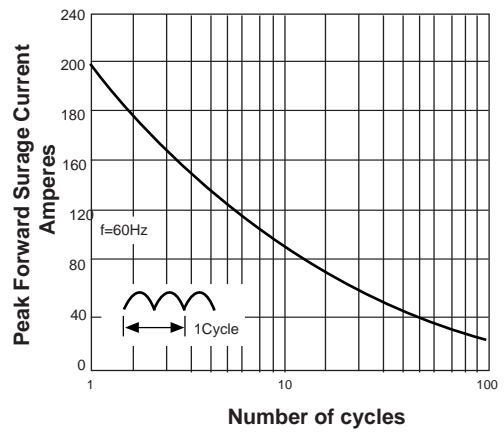
Parameter	SYMBOLS	MBR2040FAC	MBR2045FAC	MBR2060FAC	MBR20100FAC	MBR20150FAC	MBR20200FAC	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	45	60	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	40	45	60	100	150	200	V
Maximum average forward rectified current at $T_c=110^{\circ}C$	$I_{(AV)}$	20.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200.0						A
Maximum instantaneous forward voltage at 20.0A	$V_F$	0.65		0.75	0.88		0.98	V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$		0.5			0.05	10	mA
Typical thermal resistance	$R_{qJA}$	3.5						$^{\circ}C/W$
Operating junction temperature range	$T_J$	-55 to +150						$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 to +150						$^{\circ}C$

**Ratings And Characteristic Curves**

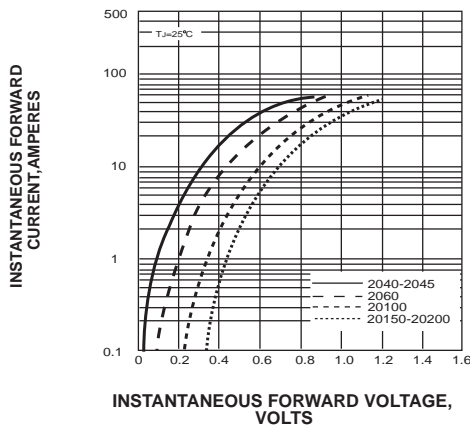
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



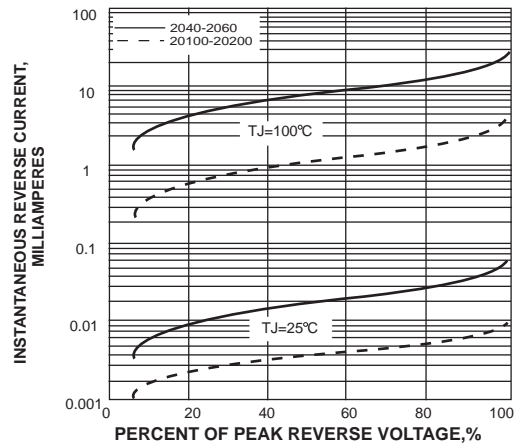
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG**



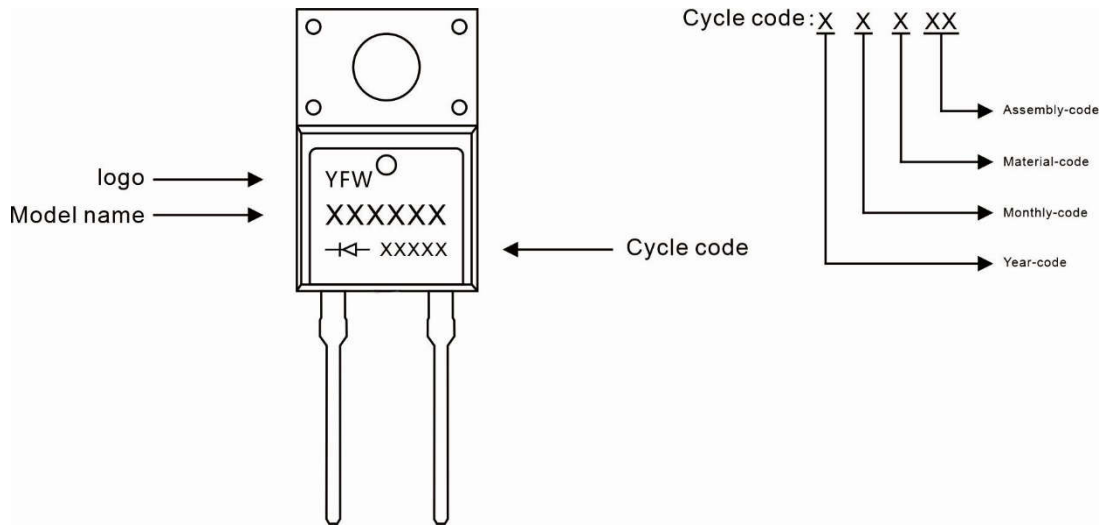
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MBRXXXXXFAC	TO-220FAC	0.06oz(1.7g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

**Package Dimensions**

**TO-220FAC**

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	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	12.90	13.50	0.508	0.531
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130

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