

**Schottky Barrier Rectifiers**

**Reverse Voltage - 150V**

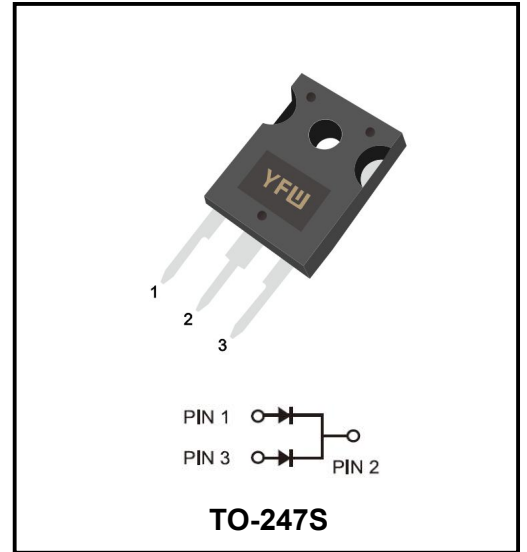
**Forward Current - 80A**

**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  
260°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 (Ta=25°C unless otherwise specified)**

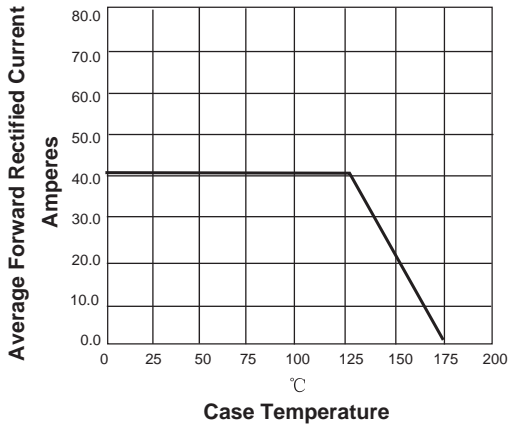
PARAMETER	SYMBOLS	MBR80150PTS	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	150	V
Maximum RMS voltage	V <sub>RMS</sub>	105	V
Maximum DC blocking voltage	V <sub>DC</sub>	150	V
Maximum average forward rectified current at T <sub>c</sub> =120°C	I <sub>(AV)</sub>	80.0 40.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300	A
Typical thermal resistance	R <sub>qJC</sub>	1.5	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +175	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

**Electrical Characteristics (Ta=25°C unless otherwise specified)**

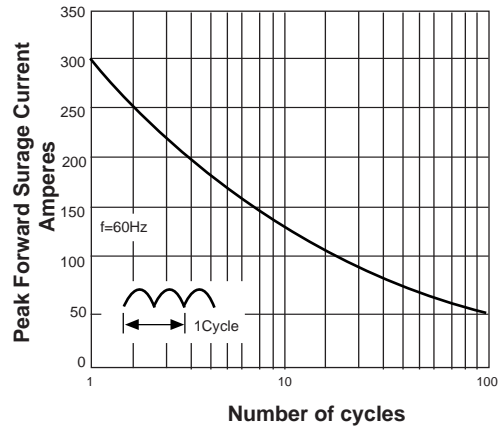
PARAMETER	SYMBOLS	TYPE	MAX	UNITS
Maximum instantaneous forward voltage per diode at 40.0A	V <sub>F</sub>	0.83	0.91	V
Maximum DC reverse current at rated DC blocking voltage	I <sub>r</sub>	0.5 2	50 20	μA mA

**Ratings And Characteristic Curves**

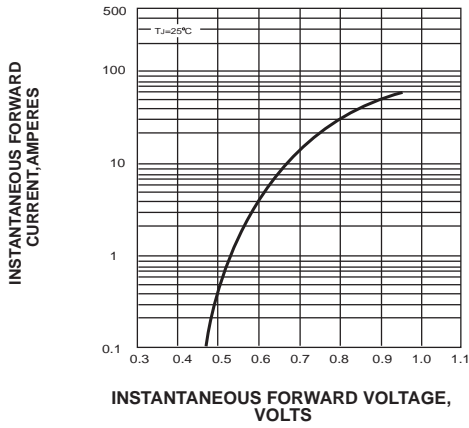
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



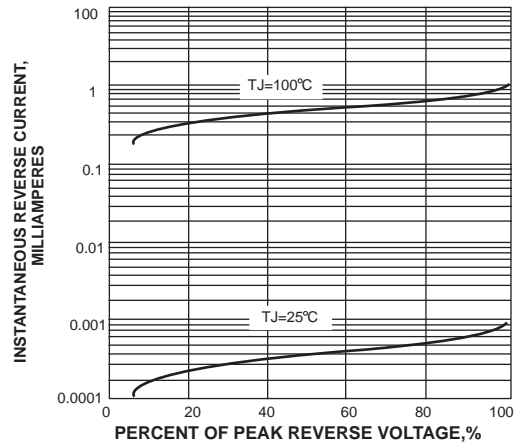
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



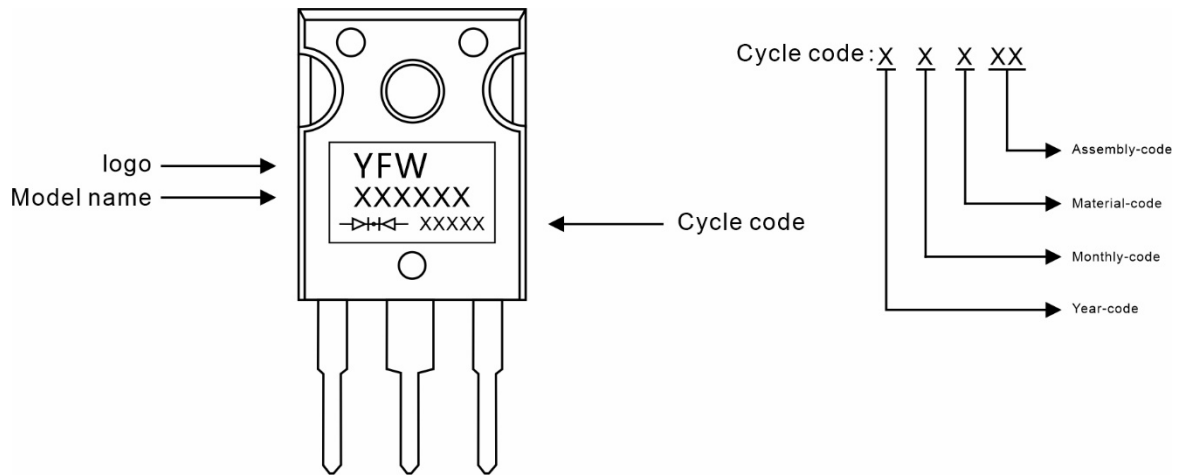
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



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



**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MBR80150PTS	TO-247S	0.158oz(4.48g)	30pcs/tube	600PCS/Box 2400PCS/Carton

**Package Dimensions**

**TO-247S**

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
E	15.40	15.80	0.60	0.62
D	19.50	20.50	0.77	0.80
S	5.30	5.50	0.21	0.22
∅R	4.50	5.50	0.18	0.22
∅P	3.40	3.80	0.13	0.15
L	14.0	14.5	0.55	0.57
L1	3.70	4.30	0.15	0.17
L2	18.5		0.73	
e	5.20	5.70	0.20	0.22
b	1.15	1.25	0.04	0.05
b1	1.80	2.20	0.07	0.09
b2	2.80	3.20	0.11	0.13
A	4.80	5.00	0.19	0.20
c	0.40	0.70	0.01	0.02
A1	2.30	2.45	0.09	0.10

## Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.