

**SCHOTTKY BARRIER RECTIFIER**

**Reverse Voltage - 100 V**

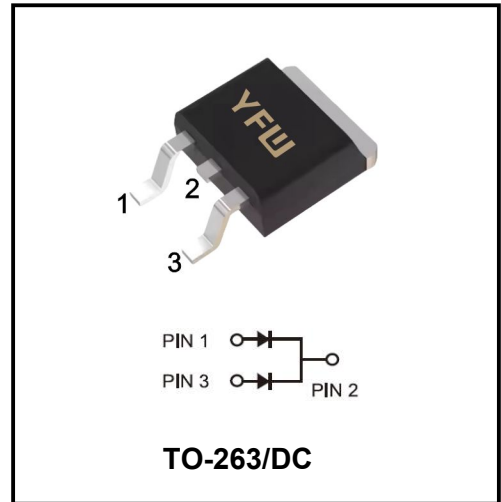
**Forward Current - 80 A**

**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: TO-263/DC
- ◆Terminals : Solder plated, solderable per MIL-STD-750,Method 2026



**Primary Characteristic**

<b>I<sub>o</sub></b>	<b>2*40A</b>
<b>V<sub>RRM</sub></b>	<b>100V</b>
<b>I<sub>FSM</sub></b>	<b>400A</b>
<b>V<sub>F</sub></b>	<b>0.85V</b>
<b>T<sub>J</sub> Max</b>	<b>175°C</b>

**Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified**

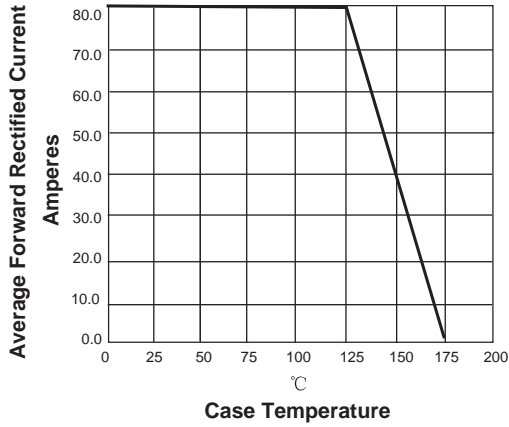
Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		<b>V<sub>RRM</sub></b>	100	<b>V</b>
Maximum RMS voltage		<b>V<sub>RMS</sub></b>	70	<b>V</b>
Maximum DC Blocking Voltage		<b>V<sub>DC</sub></b>	100	<b>V</b>
Maximum Average Forward Rectified Current	Per Leg	<b>I<sub>o</sub></b>	40	<b>A</b>
	Total		80	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave		<b>I<sub>FSM</sub></b>	400	<b>A</b>
Operating Temperature Range		<b>T<sub>J</sub></b>	-55 ~ +175	<b>°C</b>
Storage Temperature Range		<b>T<sub>STG</sub></b>	-55 ~ +150	<b>°C</b>
Typical Thermal Resistance TO-263		<b>R<sub>θJC</sub></b>	1.5	<b>°C/W</b>

**Electrical Characteristics (Per Leg) unless otherwise specified**

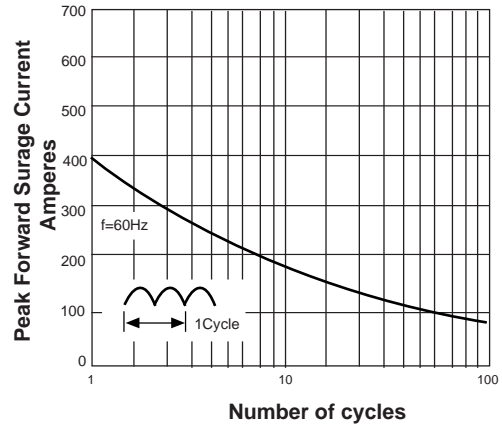
Characteristics		Symbols	Value		Units
Forward Voltage Drop		<b>V<sub>F</sub></b>	<b>Typ</b>	<b>Max</b>	<b>V</b>
at I <sub>F</sub> =40A	TA=25°C		0.85	0.95	
	TA=125°C		0.74	-	
Maximum Reverse Current at V <sub>R</sub> =100V	TA=25°C	<b>I<sub>R</sub></b>	1	20	<b>uA</b>
	TA=125°C		2	10	<b>mA</b>

**Ratings and Characteristic Curves**

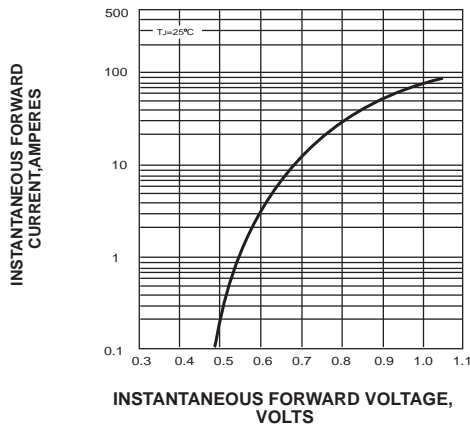
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



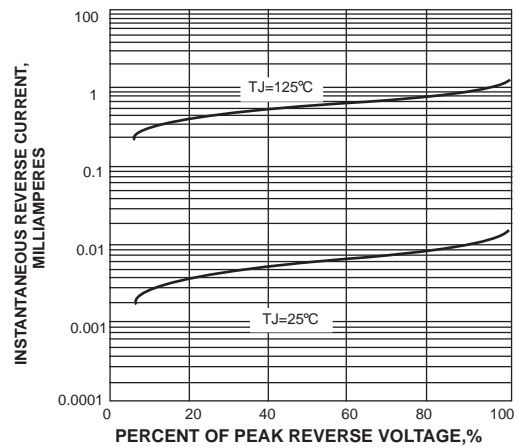
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



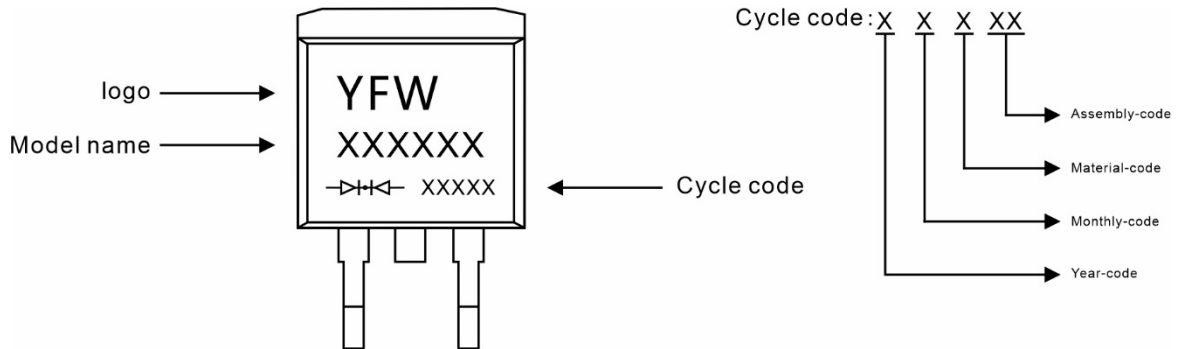
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



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



**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MBR80100DC	TO-263	0.04oz(1.16g)	800pcs/reel	1600pcs/box 8000pcs/Carton

**Package Dimensions**

TO-263

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.30	4.70	0.169	0.185
A1	0.00	0.15	0.000	0.006
A2	4.30	4.55	0.169	0.179
B	1.10	1.50	0.043	0.059
b	0.70	0.90	0.028	0.035
b1	1.20	1.50	0.047	0.059
c	0.30	0.60	0.012	0.024
c1	1.17	1.37	0.046	0.054
D	9.90	10.20	0.390	0.402
E	8.50	8.90	0.335	0.350
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
L	15.00	15.30	0.591	0.602
L1	5.20	5.40	0.205	0.213
L2	2.40	2.60	0.094	0.102
L3	1.60	1.80	0.063	0.071

## 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.