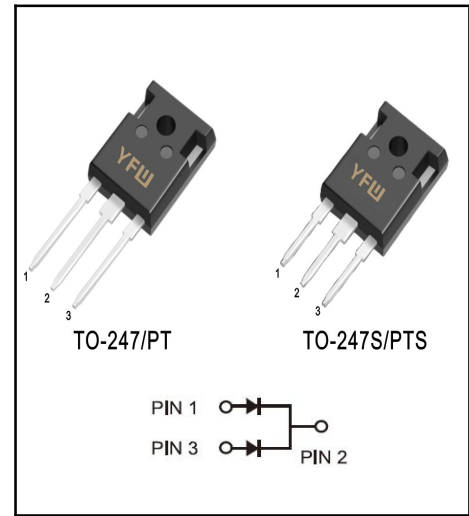


**ULTRAFST RECOVERY RECTIFIERS**
**Reverse Voltage - 1200 V**
**Forward Current - 30 A**
**FEATURES**

- ◆High speed switching capability
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses, High efficiency
- ◆High reliability
- ◆For use in low voltage, high frequency inverters

**MECHANICAL DATA**

- ◆Case: Molded plastic
- ◆Polarity: As marked
- ◆Mounting Position: Any
- ◆Molded Plastic: UL Flammability Classification Rating 94V-0
- ◆Lead free in compliance with EU RoHS 2011/65/EU directive
- ◆Solder bath temperature 275°C maximum, 10s per JESD 22-B106


**Primary Characteristic**

<b>I<sub>o</sub></b>	<b>2*15A</b>
<b>V<sub>RRM</sub></b>	<b>1200V</b>
<b>I<sub>FSM</sub></b>	<b>160A</b>
<b>V<sub>F</sub></b>	<b>1.49V</b>
<b>T<sub>J</sub>Max</b>	<b>175°C</b>

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

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	<b>V<sub>RRM</sub></b>	1200	<b>V</b>
Working Peak Reverse Voltage	<b>V<sub>RWM</sub></b>	840	<b>V</b>
Maximum DC Blocking Voltage	<b>V<sub>DC</sub></b>	1200	<b>V</b>
Maximum Average Forward Rectified Current	Per Leg	15	<b>A</b>
	Total	30	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	<b>I<sub>FSM</sub></b>	160	<b>A</b>
Operating Temperature Range	<b>T<sub>J</sub></b>	175	<b>°C</b>
Storage Temperature Range	<b>T<sub>STG</sub></b>	-55 to +175	<b>°C</b>
Typical Thermal Resistance (Note 1)	<b>R<sub>θJC</sub></b>	2	<b>°C/W</b>

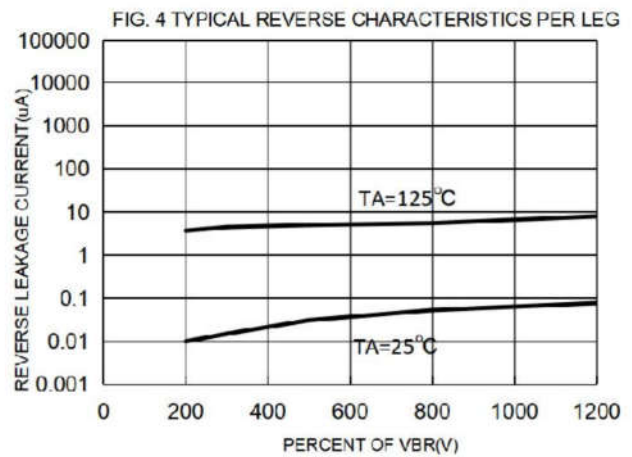
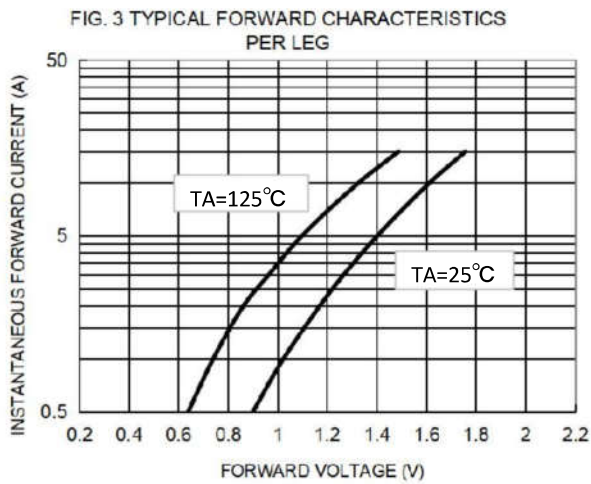
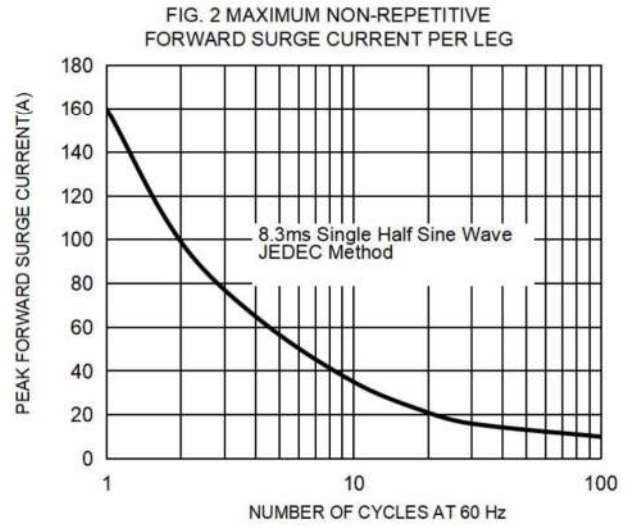
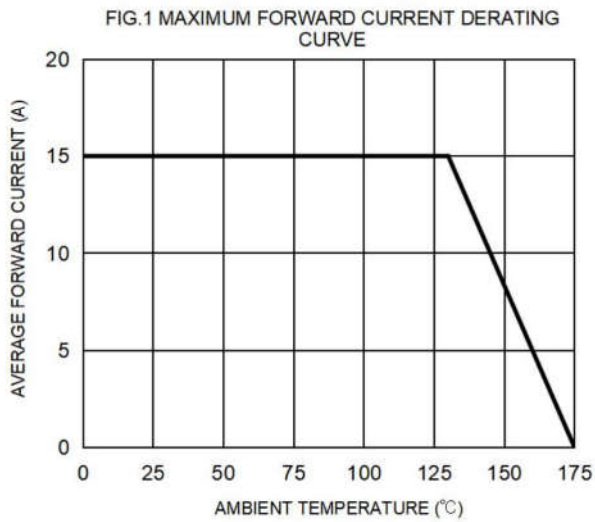
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

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

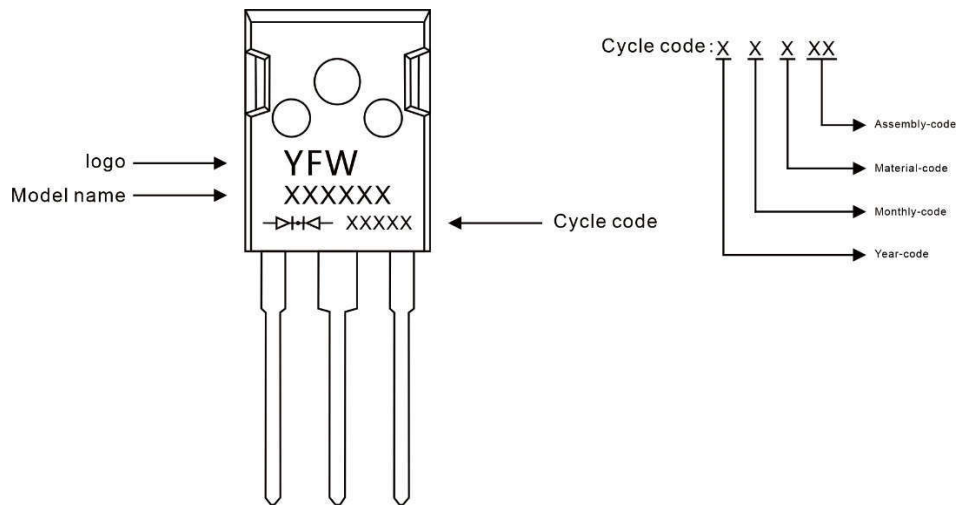
Characteristics	Symbol	Value		Unit	
Forward Voltage Drop(Note2)	<b>V<sub>F</sub></b>	Typ.	Max.	<b>V</b>	
at I <sub>F</sub> =5A		TA=25°C	1.40		-
		TA=125°C	1.10		-
at I <sub>F</sub> =10A		TA=25°C	1.61		-
		TA=125°C	1.33		-
at I <sub>F</sub> =15A		TA=25°C	1.76		2.30
		TA=125°C	1.49		-
Maximum Reverse Current at V <sub>R</sub> =1200V		TA=25°C	0.1		20
	TA=125°C	8	-	<b>μA</b>	
Maximum Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1A,	<b>T<sub>rr</sub></b>	-	65	<b>ns</b>	

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle

**RATINGS AND CHARACTERISTIC CURVES**



**Marking Diagram**



**Ordering information**

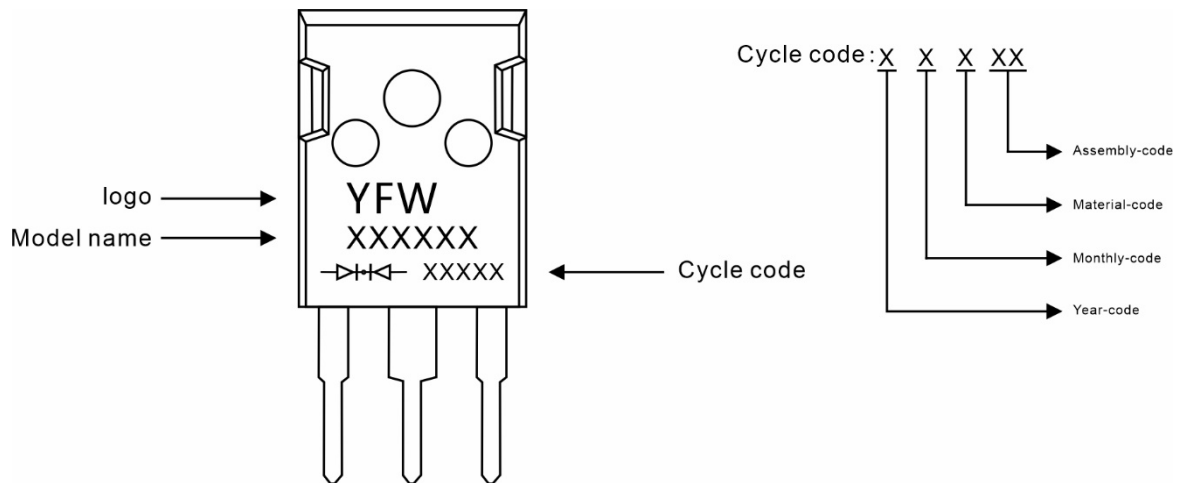
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR30120PT	TO-247	0.209oz(5.93g)	30pcs/tube	600PCS/Box 2400PCS/Carton

**Package Dimensions**

**TO-247**

Symbol	Dimensions in mm		Dimensions in Inch	
	Min.	Max.	Min.	Max.
A	4.90	5.10	0.193	0.201
A1	1.90	2.10	0.075	0.083
A2	2.29	2.54	0.090	0.100
b	1.00	1.40	0.039	0.055
b1	2.00	2.20	0.079	0.087
b2	3.00	3.20	0.118	0.126
c	0.50	0.70	0.020	0.028
D	15.75	16.05	0.620	0.632
E	20.20	20.80	0.795	0.819
e	5.45 (BSC)		0.215 (BSC)	
e1	10.90 (BSC)		0.429 (BSC)	
F	6.05	6.25	0.238	0.246
F1	5.80	6.00	0.228	0.236
L	20.10	20.40	0.791	0.803
L1	4.05	4.35	0.159	0.171
Φ	3.50	3.70	0.138	0.146

**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR30120PTS	TO-247S	0.158oz(4.48g)	30pcs/tube	600PCS/Box 2400PCS/Carton

**Package Dimensions**

**TO-247S**

Symbol	Dimensions in mm		Dimensions in Inch	
	Min.	Max.	Min.	Max.
A	15.0	16.0	0.59	0.63
B	19.5	20.5	0.77	0.81
C	33.5	35.5	1.32	1.40
D	5.0	6.0	0.20	0.24
E	3.5	4.5	0.14	0.18
F	2.5	3.5	0.10	0.14
G	1.75	2.5	0.07	0.14
H	3.0	4.0	0.12	0.16
I	9.0	11.0	0.35	0.43
J	4.9	5.1	0.19	0.20
K	1.0	1.3	0.04	0.05
L	3.75	4.25	0.15	0.17
M	4.75	5.25	0.19	0.21
N	1.8	2.2	0.07	0.09
O	0.45	0.6	0.018	0.024
P	5.08		0.2	
Q	1.2	1.3	0.05	0.051

## 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 with 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.