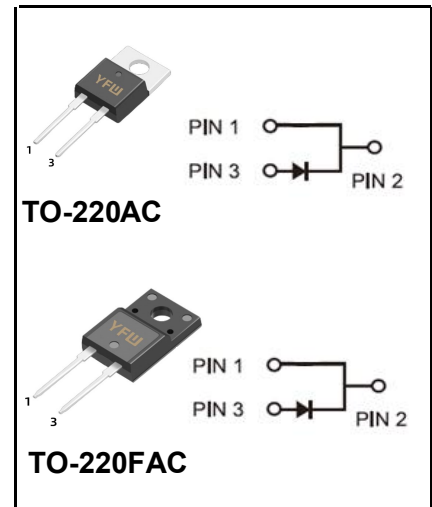


**Ultra-Fast Recovery EPI Rectifier Diodes**
**Reverse Voltage -1200 V**
**Forward Current - 15 A**
**FEATURES**

- ◆ High frequency operation
- ◆ High surge forward current capability
- ◆ High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- ◆ Guard ring for enhanced ruggedness and long term reliability
- ◆ Solder dip 275 °C max. 7s, per JESD 22-B106

**MECHANICAL DATA**

- ◆ Case: TO-220AC TO-220FAC
- ◆ Terminals: Lead solderable per MIL-STD-202, Method 208
- ◆ Lead free finish, RoHS compliant
- ◆ Case Material: “Green” molding compound,
- ◆ UL flammability classification 94V-0, “Halogen-free”.


**Primary Characteristic**

<b>I<sub>o</sub></b>	<b>15A</b>
<b>V<sub>RRM</sub></b>	<b>1200V</b>
<b>I<sub>FSM</sub></b>	<b>150A</b>
<b>V<sub>F</sub></b>	<b>3.3V</b>
<b>T<sub>J</sub> Max</b>	<b>150°C</b>

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

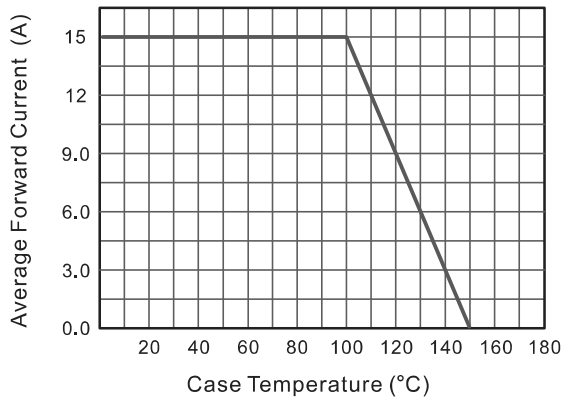
Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	<b>V<sub>RRM</sub></b>	1200	<b>V</b>
Maximum RMS voltage	<b>V<sub>RMS</sub></b>	840	<b>V</b>
Maximum DC Blocking Voltage	<b>V<sub>DC</sub></b>	1200	<b>V</b>
Maximum Average Forward Rectified Current	<b>I<sub>o</sub></b>	15	<b>A</b>
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	<b>I<sub>FSM</sub></b>	150	<b>A</b>
Operating Temperature Range	<b>T<sub>J</sub></b>	-55 ~ +150	<b>°C</b>
Storage Temperature Range	<b>T<sub>STG</sub></b>	-55 ~ +150	<b>°C</b>
Typical Thermal Resistance	<b>R<sub>θJC</sub></b>	4	<b>°C/W</b>

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

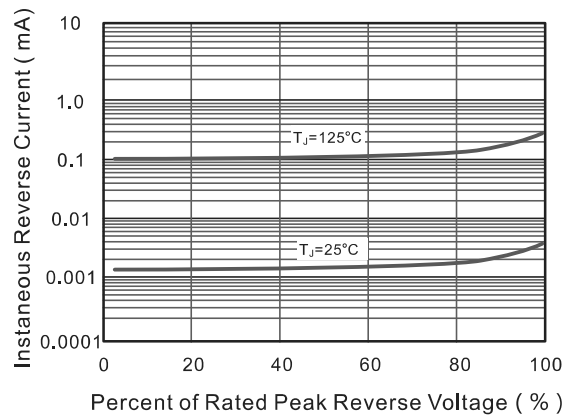
Characteristics	Symbols	Value		Units
Forward Voltage Drop	<b>V<sub>F</sub></b>	<b>Typ</b>	<b>Max</b>	<b>V</b>
Instantaneous forward voltage at 15 A		3.3	-	
Maximum Reverse Current at V <sub>R</sub> =1200V	<b>I<sub>R</sub></b>	TA=25°C	-	<b>uA</b>
		TA=125°C	-	<b>uA</b>
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A	<b>T<sub>RR</sub></b>	-	60	<b>nS</b>

**RATINGS AND CHARACTERISTIC CURVES**

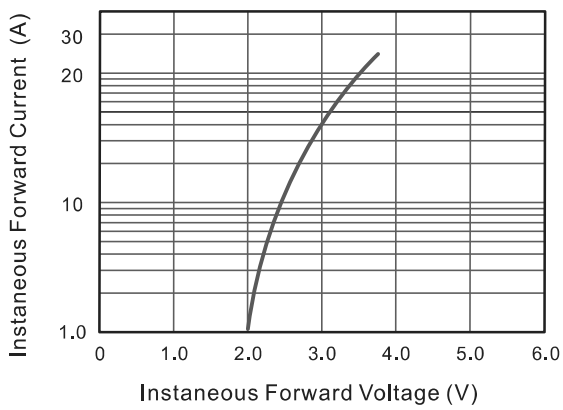
**Fig.1 Typical Forward Current Derating Curve**



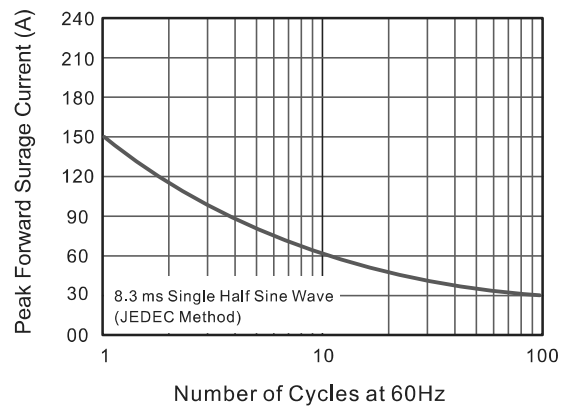
**Fig.2 Typical Reverse Characteristics**



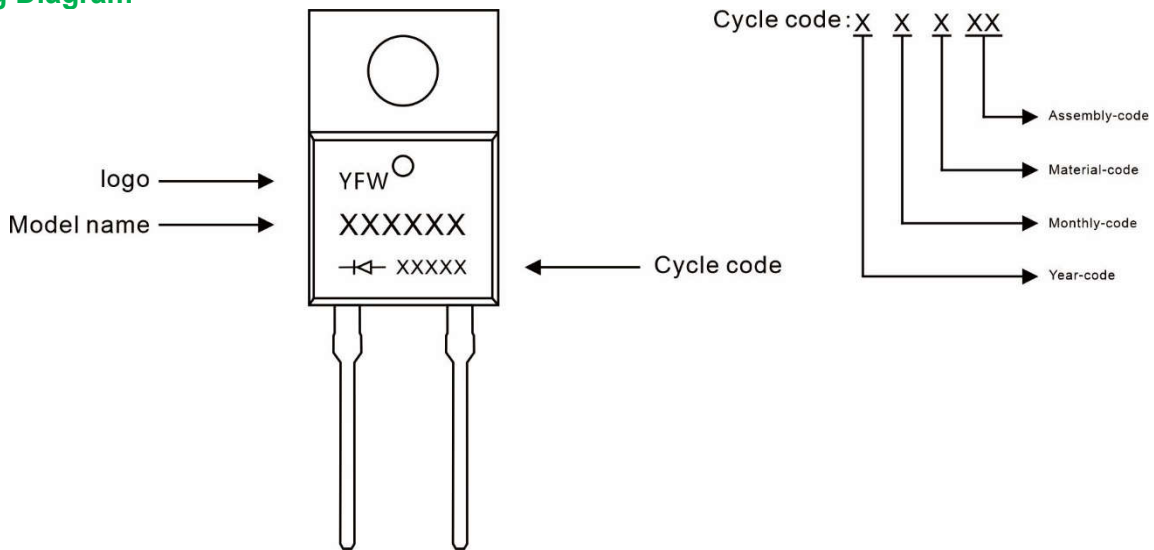
**Fig.3 Typical Forward Characteristic**



**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



**Marking Diagram**



**Ordering information**

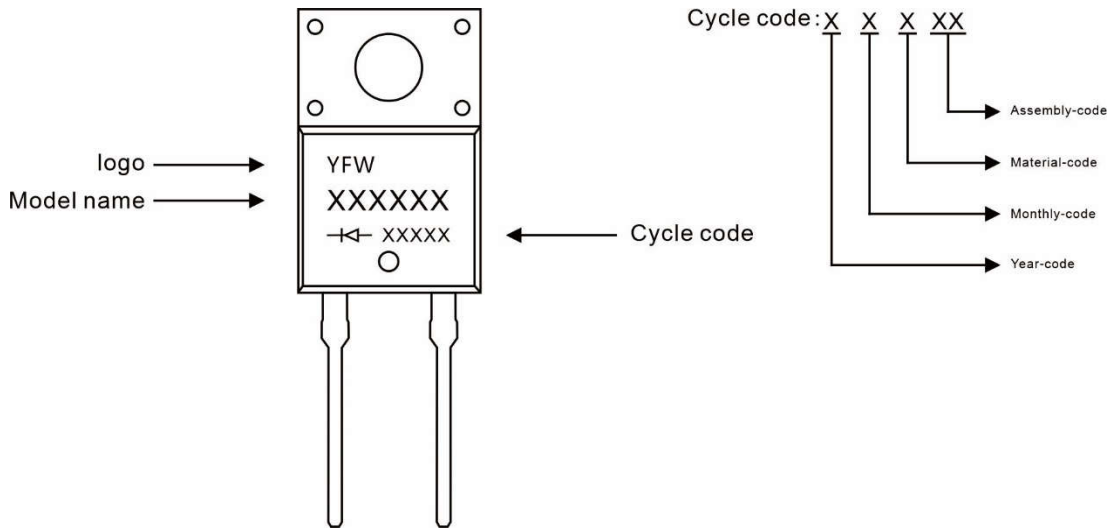
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR15120AC	TO-220AC	0.067oz(1.9g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

**Package Dimensions**

**TO-220AC**

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.34	4.67	0.171	0.184
A1	2.52	2.82	0.099	0.111
b	0.71	0.91	0.028	0.036
b1	1.17	1.37	0.046	0.054
c	0.30	0.50	0.012	0.020
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
E1	12.00	12.50	0.472	0.492
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	2.60	2.80	0.102	0.110
L	13.20	13.80	0.520	0.543
L1	3.80	4.20	0.150	0.165
Φ	3.60	3.96	0.142	0.156

**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR15120FAC	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

## Disclaimer

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