

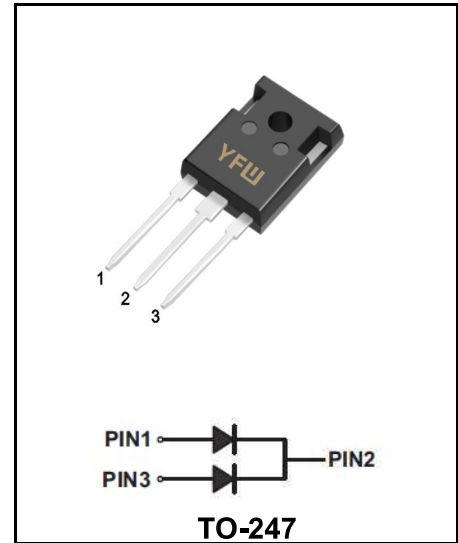
**High Efficiency Rectifiers**

**Reverse Voltage - 1200V**

**Forward Current - 40A**

**FEATURES**

- Glass passivated chip junctions
- High Speed recovery time for switching mode application
- High Forward Surge Capability
- Low Reverse Current
- Lead free in compliance with EU RoHS 2011/65/EU directive



**MECHANICAL DATA**

- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: 5.85 grams

**Maximum Ratings & Electrical Characteristics**

Rating	SYMBOL	Value	Units
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	1200	V
Maximum RMS voltage	V <sub>RMS</sub>	850	V
DC Blocking Voltage	V <sub>DC</sub>	1200	V
Average Forward Current per device per diode	I <sub>F</sub>	40 20	A
Max. Forward Surge Current ,8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	500	A
Typical Forward Voltage at I <sub>F</sub> =20A	V <sub>F</sub>	2.0	V
Max. DC Reverse Current at T <sub>A</sub> =25°C Rated DC Blocking Voltage T <sub>A</sub> =125°C	I <sub>R</sub>	5 250	μA
Typical Reverse Recovery Time (Note 1)	T <sub>RR</sub>	200	nS
Typical Thermal Resistance(Note 2)	R <sub>θ-JC</sub>	1.5	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

NOTES:

1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.
2. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

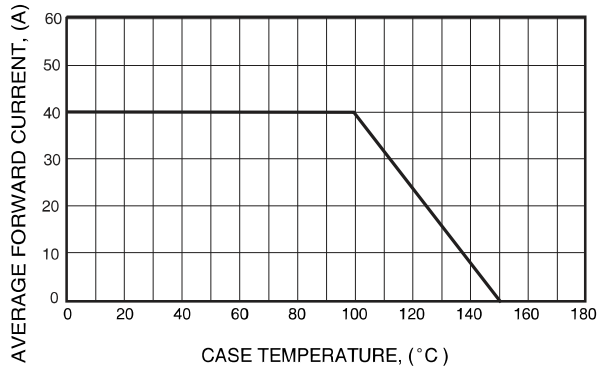


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

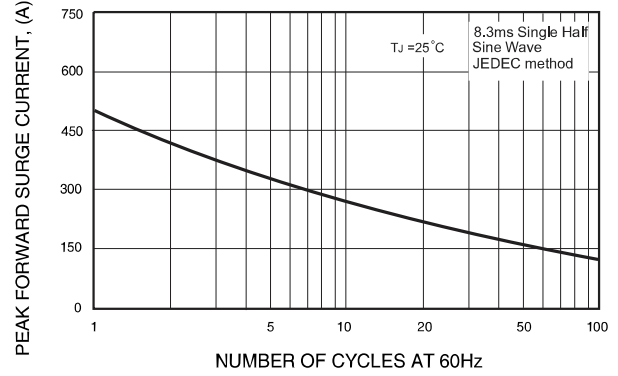


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

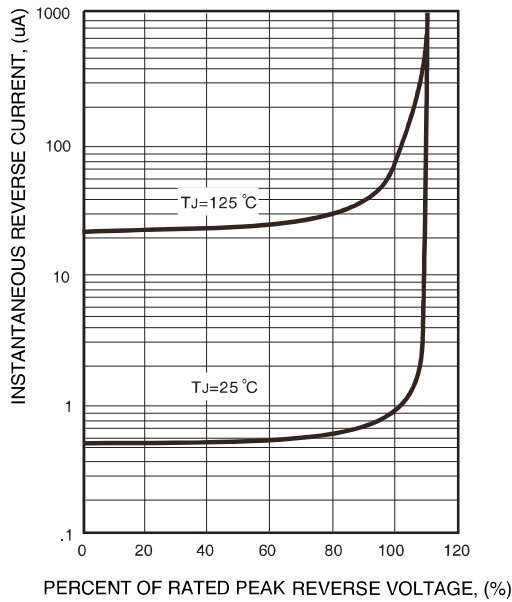
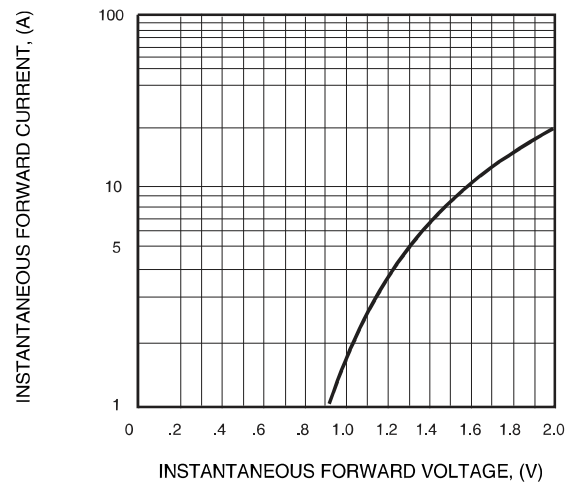
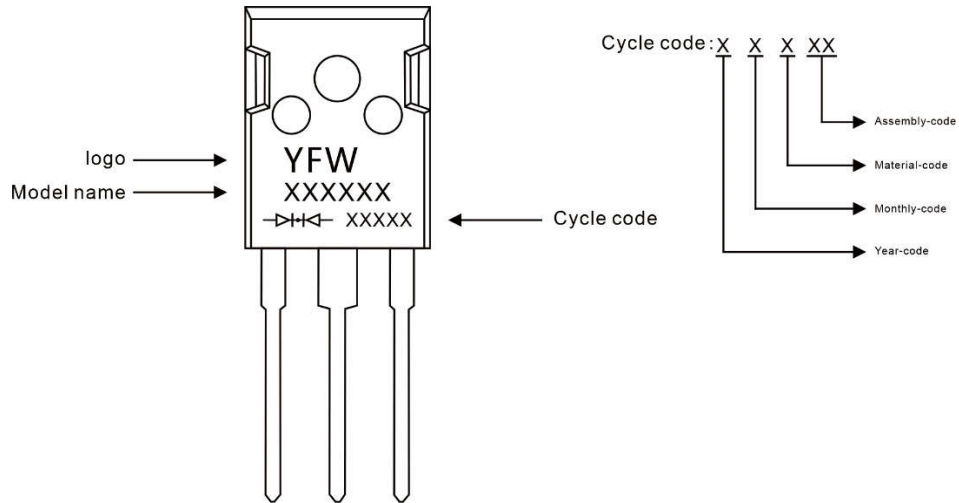


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR40120SPT	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

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