

ULTRAFAST RECOVERY RECTIFIERS
Reverse Voltage - 600 V
Forward Current - 30A
FEATURES

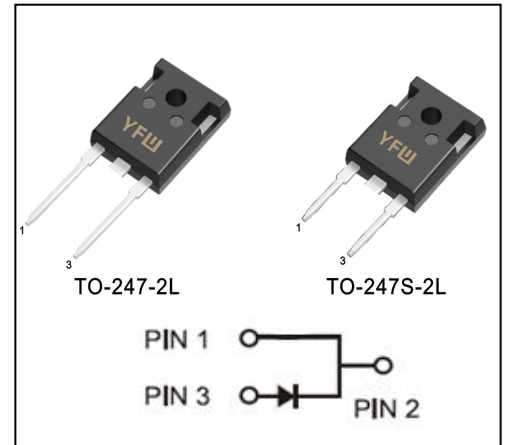
- ◆ High speed switching capability
- ◆ High current capability
- ◆ High forward surge capability
- ◆ Low power losses, High efficiency
- ◆ High reliability
- ◆ For use in low voltage, high frequency inverters

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

I_o	30A
V_{RRM}	600V
I_{FSM}	420A
V_F	1.06V
T_{jmax}	150°C
Assembly code	EP


Maximum Ratings at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Working Peak Reverse Voltage	V_{RWM}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	I_o	30	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	420	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

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

Electrical Characteristics unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=5A$	TA=25°C		0.91	-	
	TA=125°C		0.71	-	
at $I_F=10A$	TA=25°C		1.02	-	
	TA=125°C		0.82	-	
at $I_F=30A$	TA=25°C		1.24	1.59	
	TA=125°C	1.06	-		
Maximum Reverse Current at $V_R=600V$	TA=25°C	I_R	0.1	1	μA
	TA=125°C		15	-	μA
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A,$		T_{rr}	-	50	ns

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

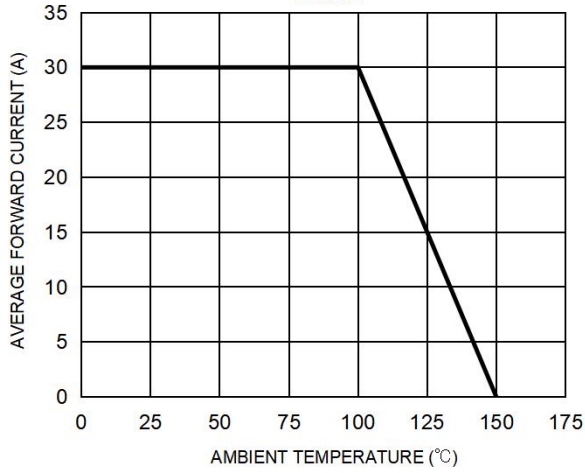


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

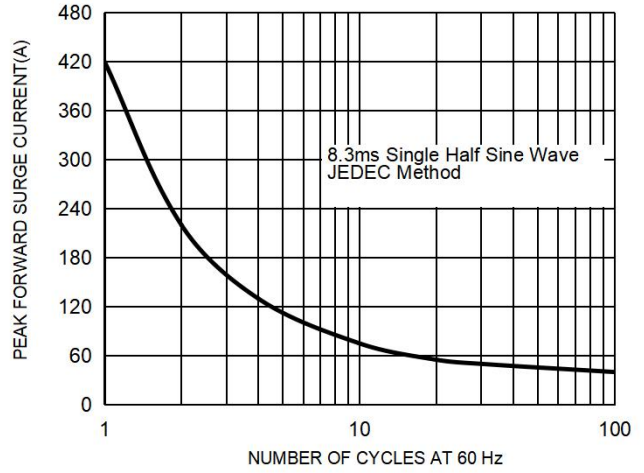


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

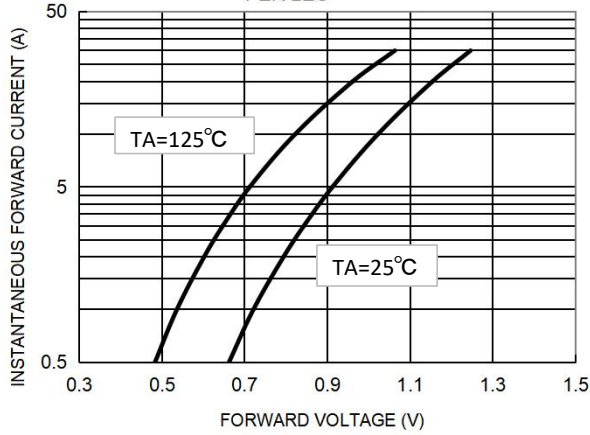
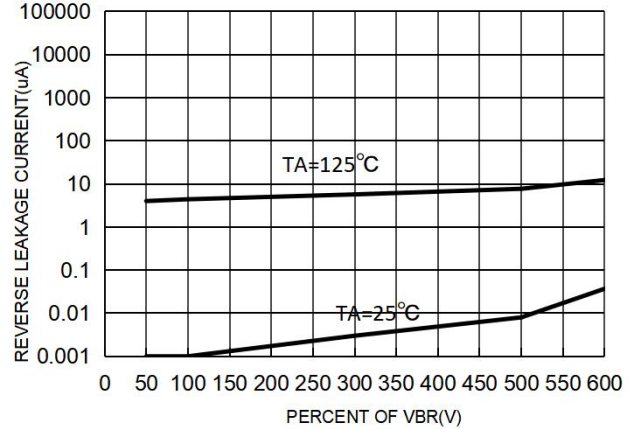
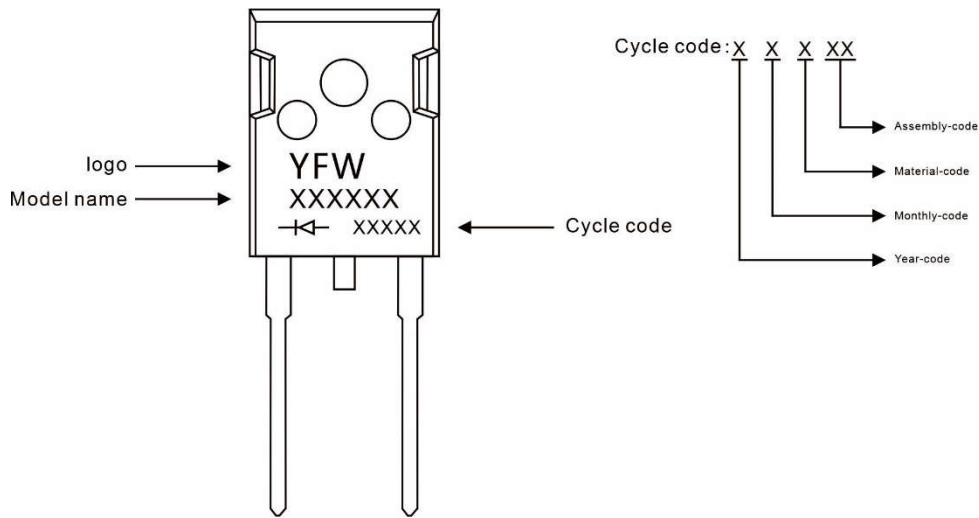


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking Diagram



Ordering information

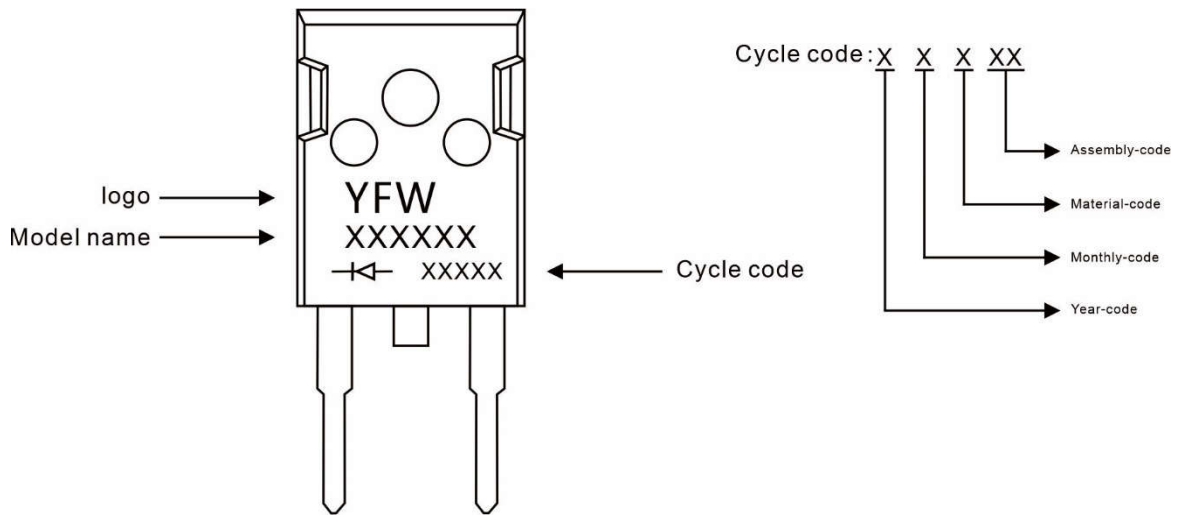
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR3060W	TO-247-2L	0.209oz(5.93g)	30pcs/tube	600PCS/Box 2400PCS/Carton

Package Dimensions

TO-247-2L

Symbol	Dimensions in mm		Dimensions in Inch	
	Min.	Max.	Min.	Max.
A	15.0	16.0	0.59	0.63
B	20.0	21.0	0.79	0.83
C	41.0	42.0	1.61	1.65
D	5.0	6.0	0.20	0.24
E	4.0	5.0	0.157	0.197
F	2.5	3.5	0.10	0.138
G	1.75	2.5	0.069	0.10
H	3.0	3.5	0.118	0.138
I	8.0	10.0	0.315	0.394
J	4.9	5.1	0.192	0.201
K	1.9	2.1	0.075	0.083
L	3.5	4.0	0.138	0.157
M	4.75	5.25	0.187	0.207
N	2.0	3.0	0.079	0.118
O	0.55	0.75	0.0217	0.030
P	5.06		0.199	
Q	1.2	1.3	0.047	0.051

Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR3060WS	TO-247-2L	0.158oz(4.48g)	30pcs/tube	600PCS/Box 2400PCS/Carton

Package Dimensions

TO-247-2L

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	0.138	0.177
F	2.5	3.5	0.10	0.138
G	1.75	2.5	0.069	0.10
H	3.0	4.0	0.118	0.157
I	9.0	11.0	0.354	0.433
J	4.9	5.1	0.193	0.201
K	1.0	1.3	0.039	0.051
L	3.75	4.25	0.148	0.167
M	4.75	5.25	0.187	0.207
N	1.8	2.2	0.071	0.087
O	0.45	0.6	0.018	0.024
P	5.08		0.2	
Q	1.2	1.3	0.047	0.051

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