

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

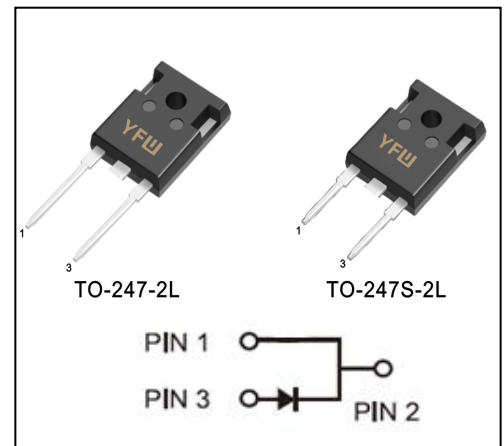
- ◆High speed switching capability
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses, High efficiency
- ◆High reliability
- ◆For use in low voltage,high frequency inverters

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

I_o	30A
V_{RRM}	600V
I_{FSM}	390A
V_F	1.14V
T_{rr}	42ns
T_J Max	175°C


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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	I_o	30	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	390	A
Operating Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	-50 ~ +150	°C
Typical Thermal Resistance (Note1)	R_{θJC}	2/4	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I _F =10A	TA=25°C		1.03	-	
	TA=125°C		0.86	-	
at I _F =15A	TA=25°C		1.10	-	
	TA=125°C		0.96	-	
at I _F =30A	TA=25°C		1.27	1.6	
	TA=125°C		1.14	-	
Maximum Reverse Current at V _R =600V	TA=25°C	I_R	0.1	2	uA
	TA=125°C		10	-	uA
Maximum Reverse Recovery Time at I _F =0.5A, I _R =1A, I _{RR} =0.25A		T_{RR}	42	55	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

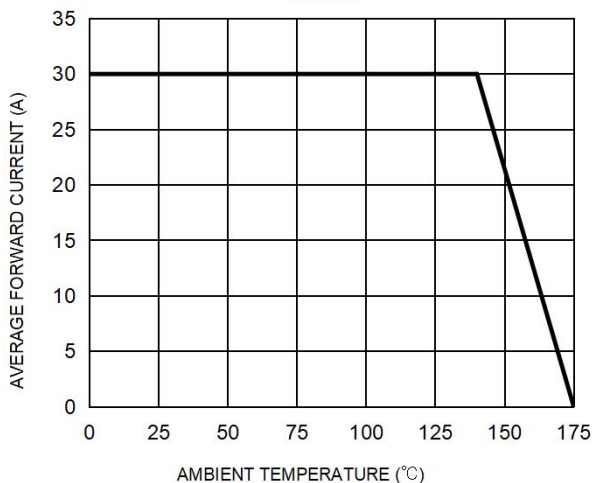


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

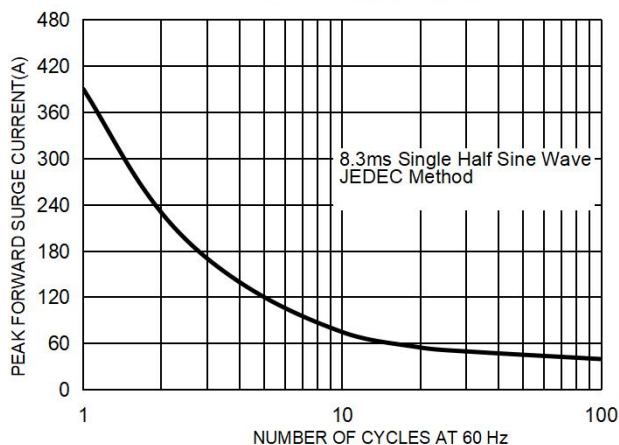


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

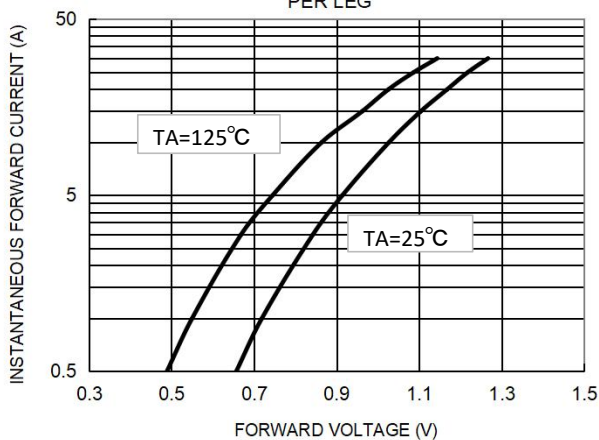
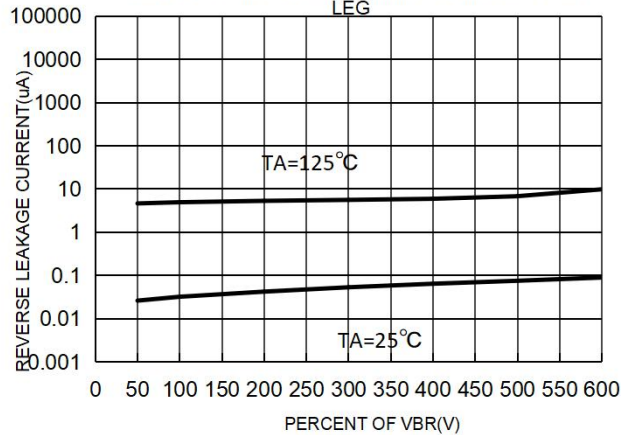
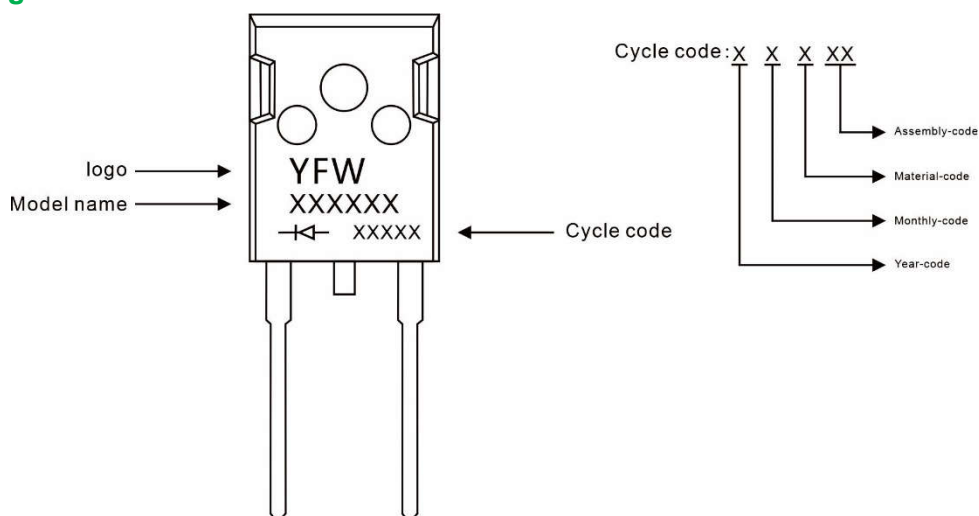


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking Diagram



Ordering information

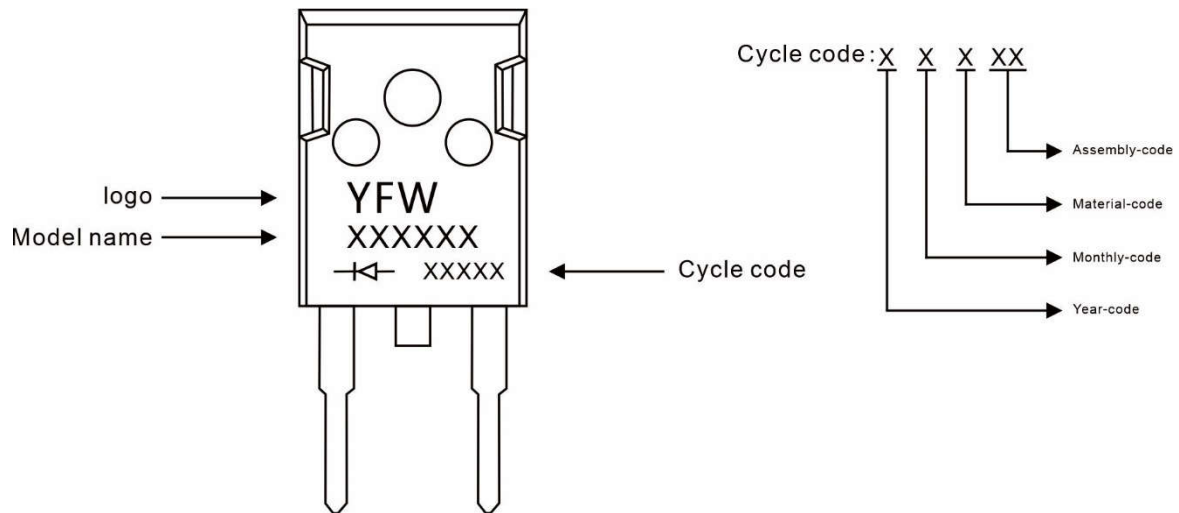
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR3060W	TO-247-2L	0.209oz(5.93g)	30pcs/tube	600PCS/Box 2400PCS/Carton

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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