

ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 600 V

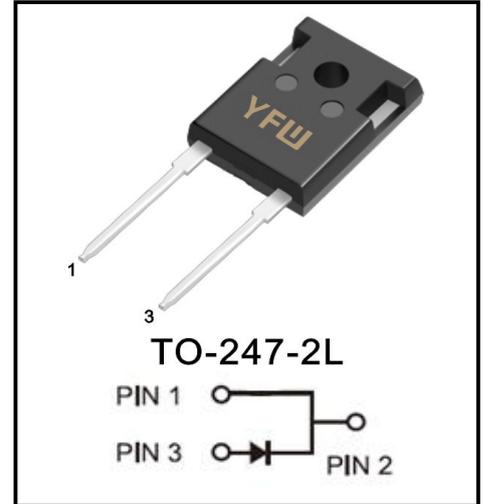
Forward Current - 60 A

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: TO-247-2L/W
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106



Primary Characteristic

I_o	60A
V_{RRM}	600V
I_{FSM}	390A
V_F	1.14V
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	60	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	390	A
Operating Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	-50 to +175	°C
Typical Thermal Resistance (Note1) TO-247/PT TO-247/PTS	R_{θJC}	2	°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	1.60	
	TA=125°C		1.14	-	
at I _F =60A	TA=25°C		1.52	2.00	
	TA=125°C		1.38	-	
Maximum Reverse Current at V _R =600V	TA=25°C		I_R	0.1	
	TA=125°C		10	-	μA
Maximum Reverse Recovery Time at I _F =0.5A, I _R =1A,		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

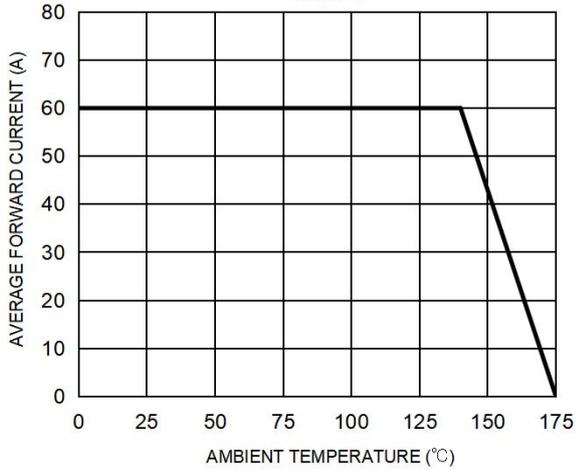


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

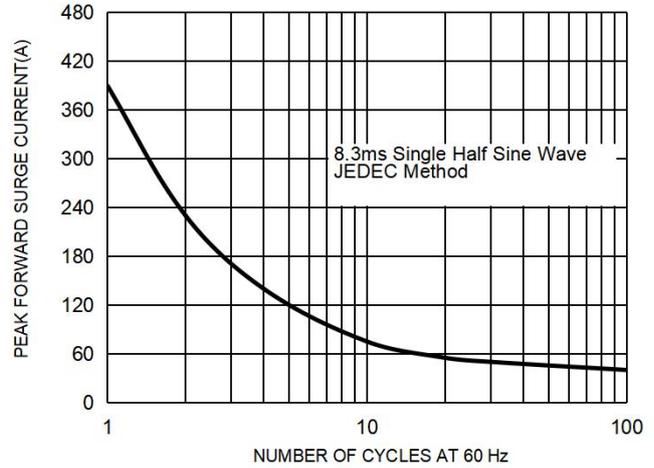


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

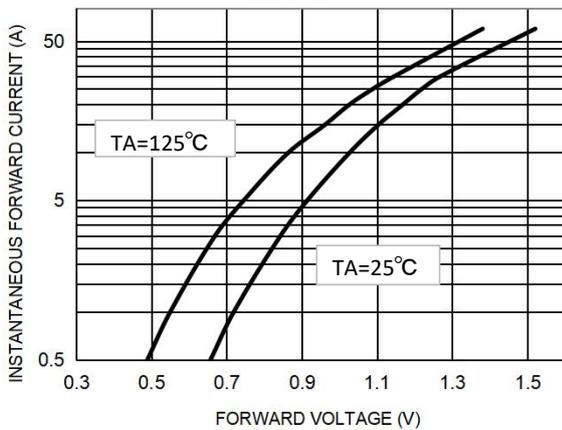
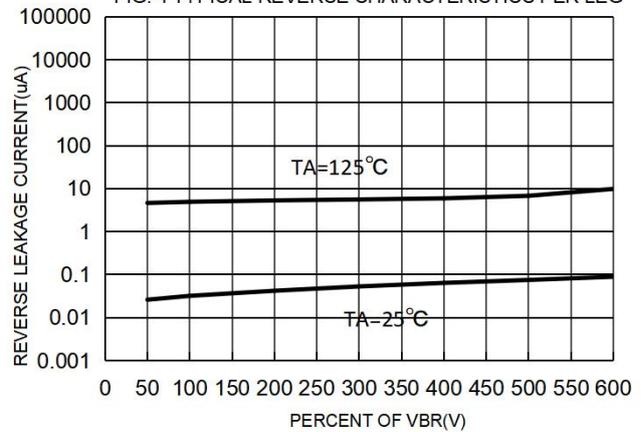
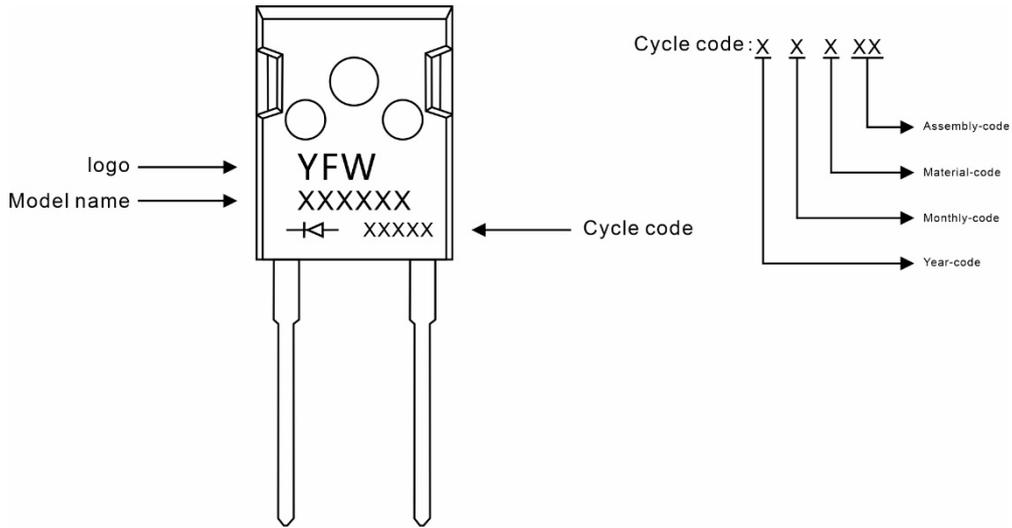


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR6060W	TO-247-2L	0.209oz(5.93g)	30pcs/tube	600PCS/Box 3000PCS/Carton

Package Dimensions

TO-247-2L

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
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
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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