

Super Fast Recovery Rectifiers
Reverse Voltage - 1200 V
Forward Current - 10 A
FEATURES

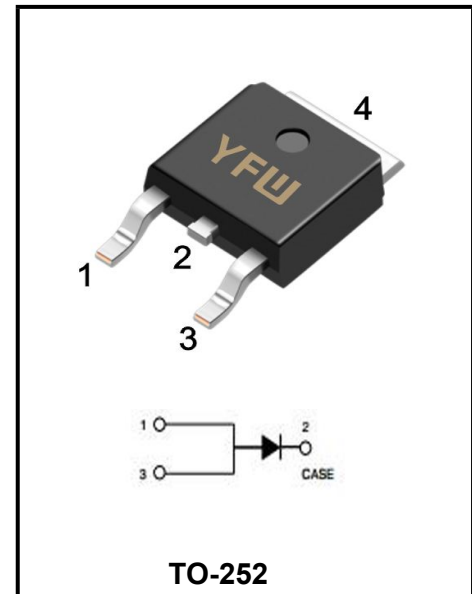
- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Construction utilizes void-free molded plastic technique
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed
260°C/10 seconds at terminals

MECHANICAL DATA

- ◆Case:TO-252/SCS
- ◆Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any

Primary Characteristic

I_o	10A
V_{RRM}	1200V
I_{FSM}	150A
V_F	2.05V
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}	1200	V
Working Peak Reverse Voltage	V_{RWM}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Rectified Current T _C =110 °C	I_o	10	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Operating Temperature Range	T_J	-50 ~ +175	°C
Storage Temperature Range	T_{STG}	-50 ~ +175	°C
Typical Thermal Resistance	R_{θJC}	4.0	°C/W

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I _F =5A	TA=25°C		2.02	-	
	TA=125°C		1.84	-	
at I _F =10A	TA=25°C		2.2	2.5	
	TA=125°C	2.05	-		
Maximum Reverse Current at V _R =1200V	TA=25°C	I_R	0.1	5	uA
	TA=125°C		20	200	uA
Maximum reverse recovery time		T_{rr}	40	50	ns

Note: Reverse recovery time test condition: I_F=0.5A I_R=1.0A I_{rr}=0.25A

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

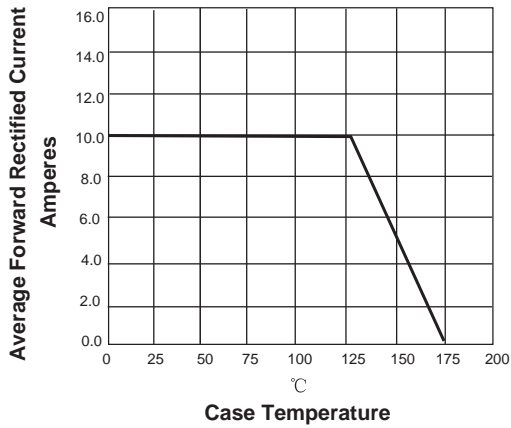


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

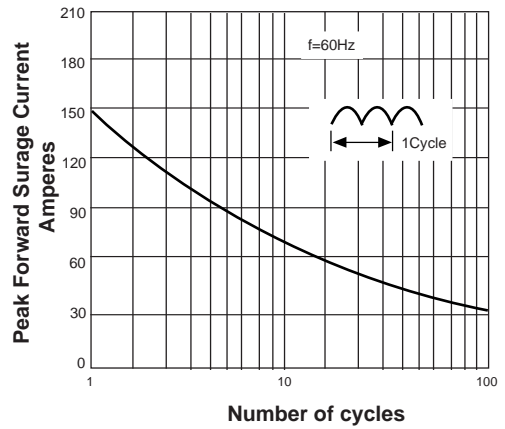


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

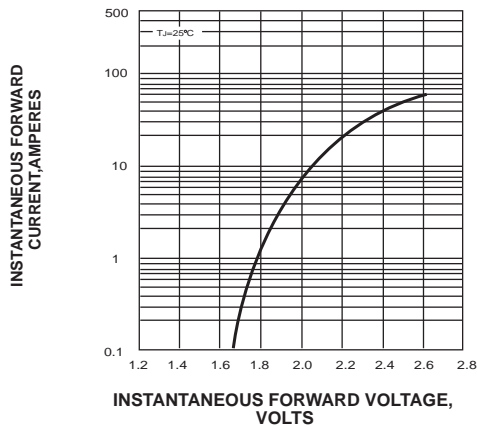
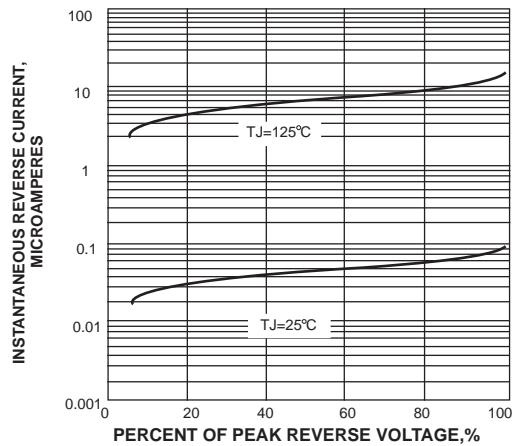
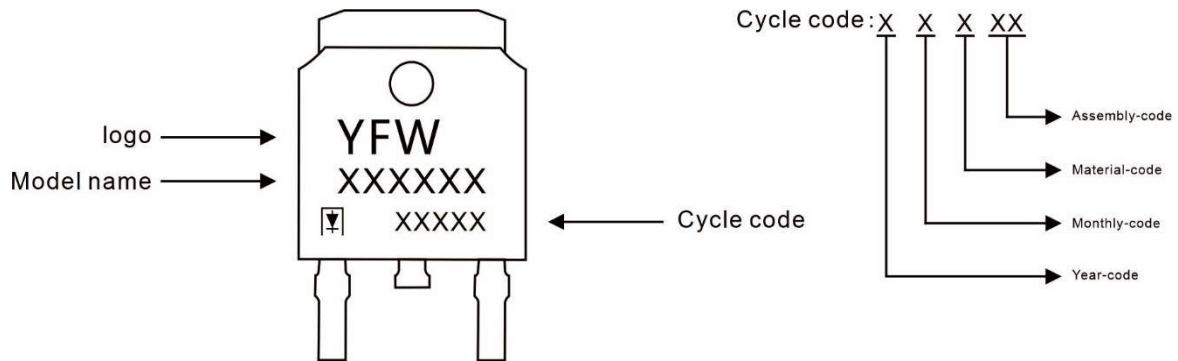


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR10120SCS	TO-252	0.011oz(0.32g)	2500pcs/reel	5000pcs/box 25000pcs/Carton

Package Dimensions
TO-252

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.20	2.50	0.087	0.098
A1	0.00	0.12	0.000	0.005
A2	2.20	2.40	0.087	0.094
B	1.20	1.60	0.047	0.063
b	0.50	0.70	0.020	0.028
b1	0.70	0.90	0.028	0.035
c	0.40	0.60	0.016	0.024
c1	0.40	0.60	0.016	0.024
D	6.35	6.65	0.250	0.262
D1	5.20	5.40	0.205	0.213
E	5.40	5.70	0.213	0.224
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	10.00	11.00	0.393	0.433
L1	2.70	3.10	0.106	0.122
L2	1.40	1.80	0.055	0.071
L3	0.90	1.50	0.035	0.059

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