

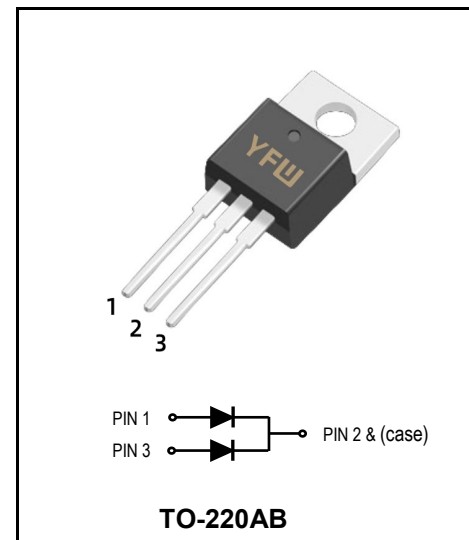
## High Efficiency Rectifiers

Reverse Voltage - 800V

Forward Current - 20A

### 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

- Circuit figure: Common Cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C)

RATINGS	SYMBOL	Value	Units
Maximum repetitive reverse voltage	$V_{RRM}$	800	V
Maximum RMS voltage	$V_{RMS}$	560	V
Maximum DC blocking voltage	$V_{DC}$	800	V
Maximum average forward current	$I_{AV}$	20	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	250	A
Typical thermal resistance per diode (Note 1)	$R_{\theta-JC}$	2.5	°C/W
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 ~ +150	°C
<b>CHARACTERISTICS</b>			
Maximum forward voltage per leg at 10 A	$V_F$	2.4	V
Maximum average reverse current at rated DC blocking voltage	$I_R$	5 250	$\mu A$
Maximum reverse recovery time (Note 2)	$T_{RR}$	35	nS

Notes: 1. Thermal resistance from junction to case.  
2. Test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ .

**Ratings And Characteristic Curves**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

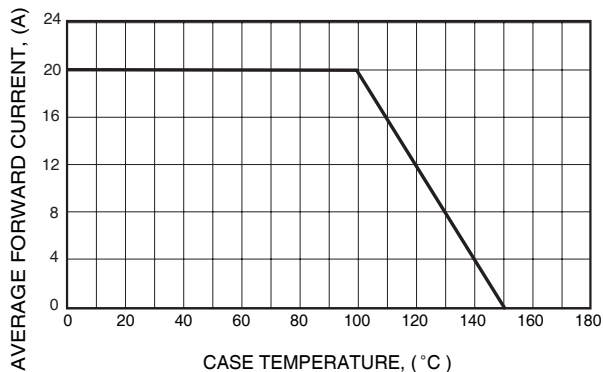


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

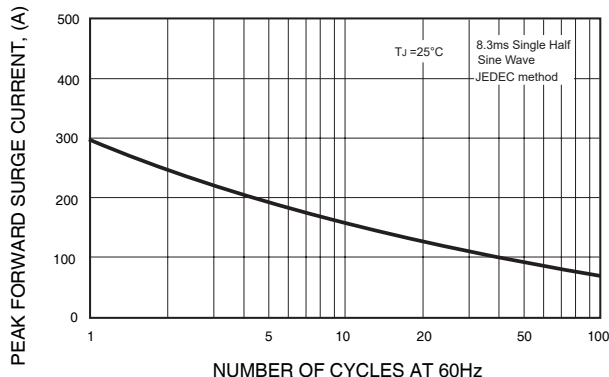


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

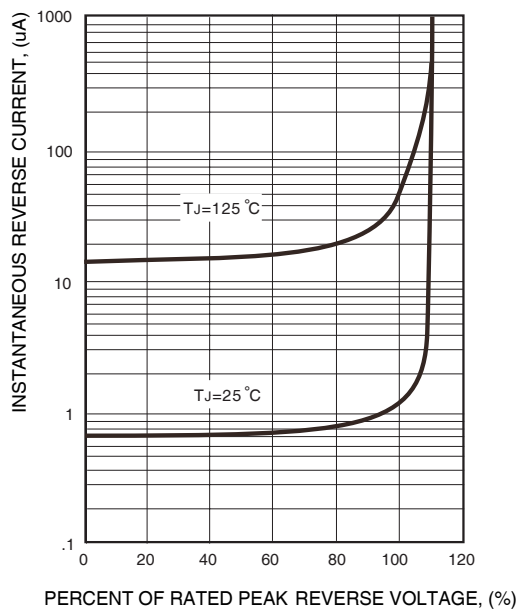


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

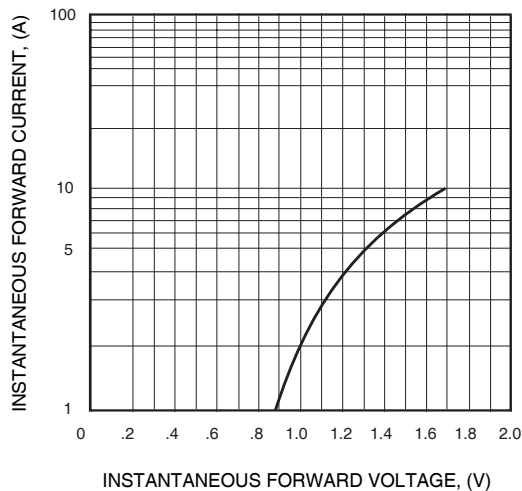
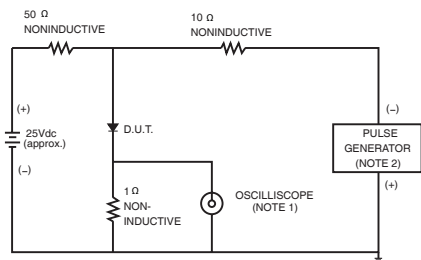
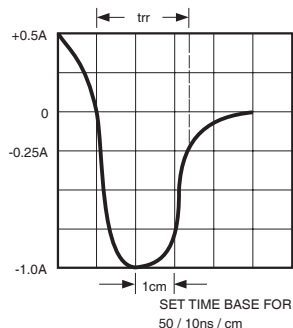


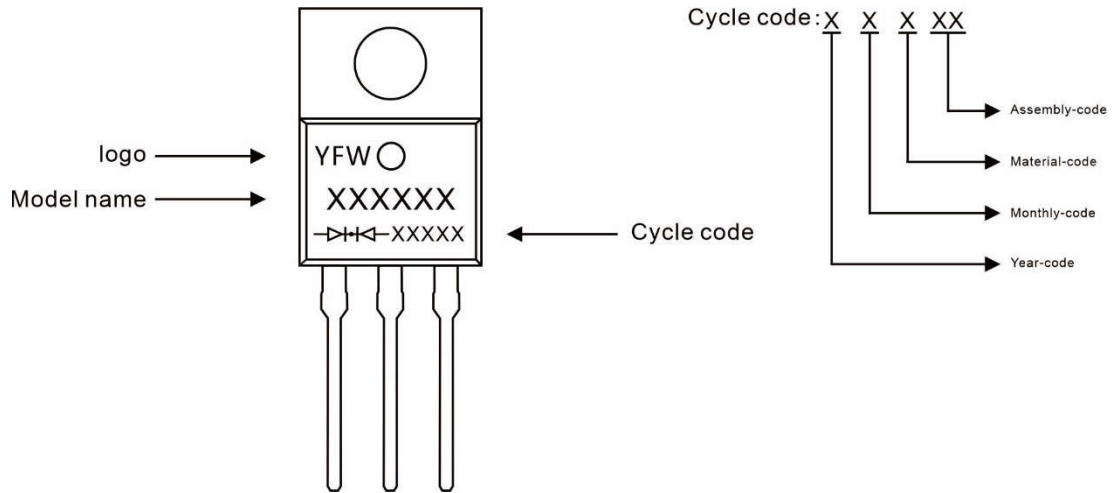
FIG.6- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.



**Marking Diagram**



**Ordering information**

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MUR2080DT	TO-220AB	0.07oz(1.96g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

**Package Dimensions**

**TO-220AB**

Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.30	4.70	0.169	0.185
A1	2.52	2.82	0.099	0.111
b	0.71	0.91	0.028	0.036
b1	1.17	1.37	0.046	0.054
c	0.30	0.50	0.012	0.020
c1	1.17	1.37	0.046	0.054
D	9.90	10.20	0.390	0.402
E	8.50	8.90	0.335	0.350
E1	12.00	12.50	0.472	0.492
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	2.60	2.80	0.102	0.110
L	13.20	13.80	0.520	0.543
L1	3.80	4.20	0.150	0.165
Φ	3.60	3.96	0.142	0.156

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