

Ultra Fast Recovery Rectifiers

Reverse Voltage - 50V to 1000V

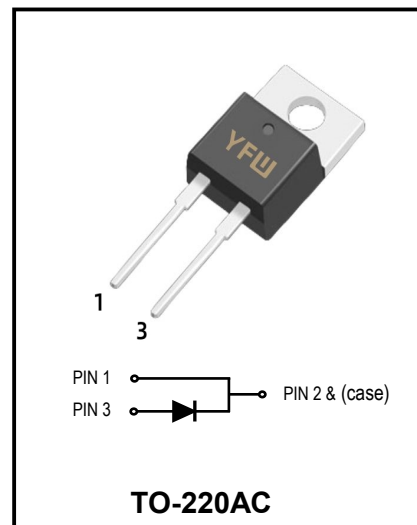
Forward Current - 8A

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 250°C/10 seconds at terminals

MECHANICAL DATA

- ◆Case :TO-220AC/DA
- ◆Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any



Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MUR805DA	MUR810DA	MUR840DA	MUR860DA	MUR880DA	MUR8100DA	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	400	600	800	1000	V
Maximum average forward rectified current at T _c =110 °C	I_(AV)	8.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125.0						A
Maximum instantaneous forward voltage at 8.0A	V_F	1.0		1.4	1.8			V
Maximum DC reverse current at rated DC blocking voltage	I_R	10 500						μA
Maximum reverse recovery time	T_{rr}	50			75			ns
Typical thermal resistance	R_{qJA}	35.0						°C/W
Operating junction temperature range	T_J	-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150						°C

Note: 1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

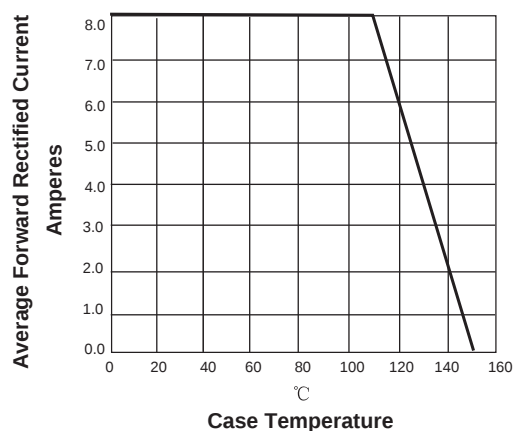


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

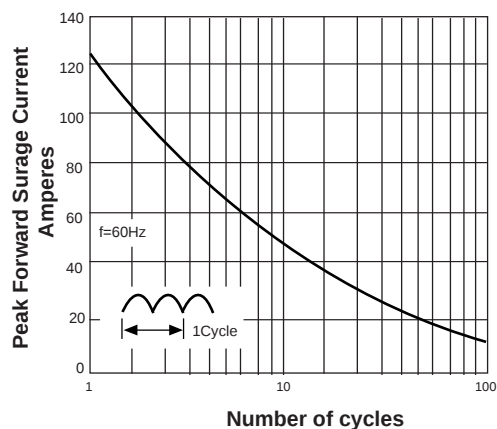


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

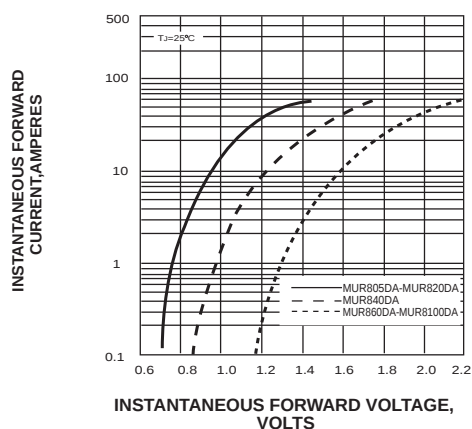
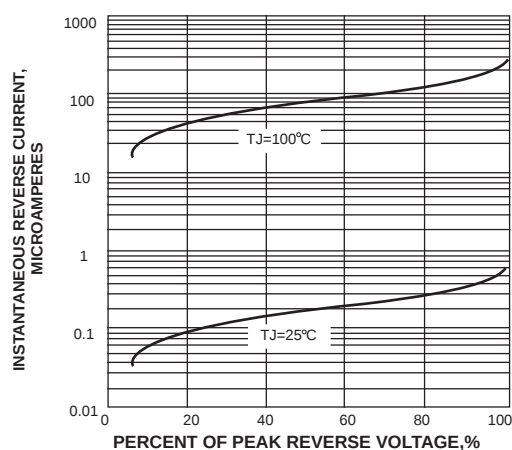
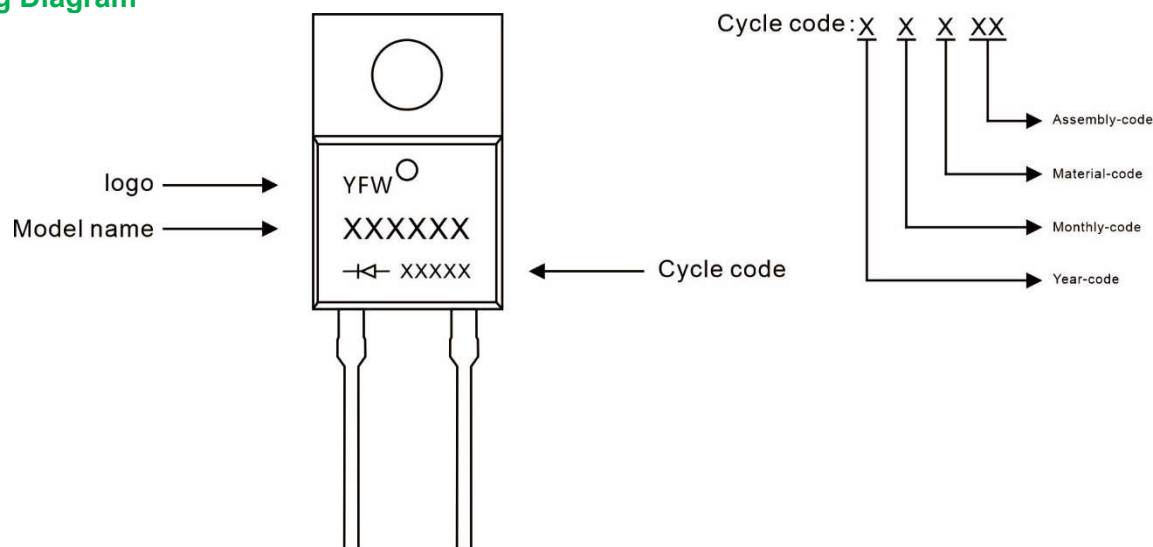


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MURXXXXXDA	TO-220AC	0.067oz(1.9g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

Package Dimensions

TO-220AC

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.34	4.67	0.171	0.184
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	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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