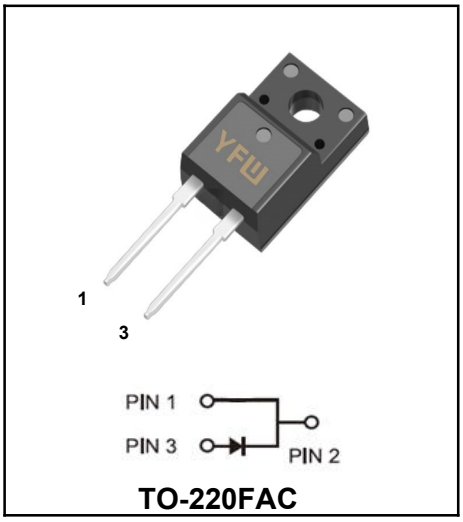
MUR1520DAF THRU MUR1580DAF

Super Fast Rectifiers

Reverse Voltage - 200V to 800V

Forward Current - 15A



TO-220FAC

FEATURES

- Glass passivated chip junctions
- Super fast 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:Single positive
- 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℃)

RATINGS	SYMBOL	MUR1520DAF	MUR1530DAF	MUR1540DAF	MUR1560DAF	MUR1570DAF	MUR1580DAF	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	300	400	600	700	800	V
Maximum RMS voltage	V_{RMS}	140	210	280	420	490	560	V
Maximum DC Blocking Voltage	V_{DC}	200	300	400	600	700	800	V
Maximum average forward current	$I_{(AV)}$	15						A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250						A
Typical thermal resistance	$R_{\theta JC}$	4.0						°C/W
Operating junction temperature range	T_J	-55 ~ +150						°C
Storage temperature range	T_{stg}	-55 ~ +150						°C
CHARACTERISTICS								
Maximum forward voltage per leg at 15A	V_F	1.0	1.3	1.3	1.8	2.6	2.6	V
Maximum DC reverse current T_J = 25°C at rated DC blocking voltage T_J = 125°C	I_R	5 250						μA
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

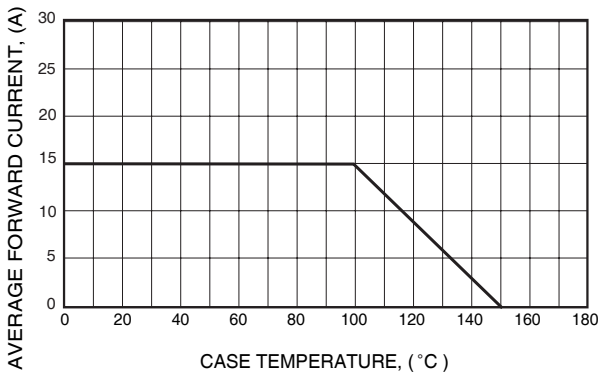


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

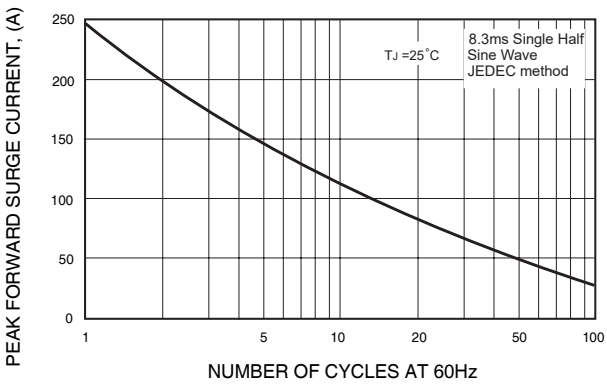


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

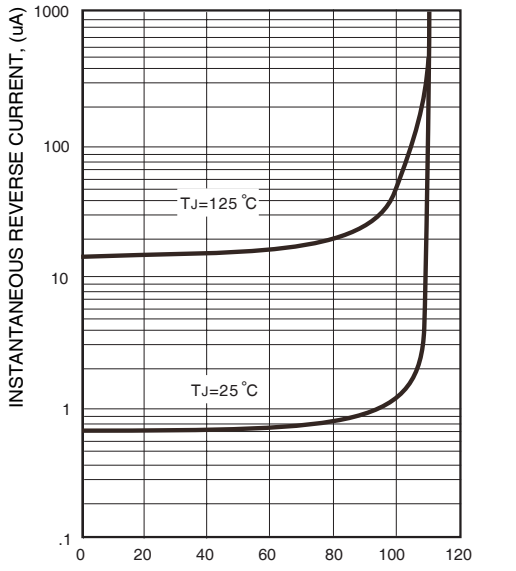


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

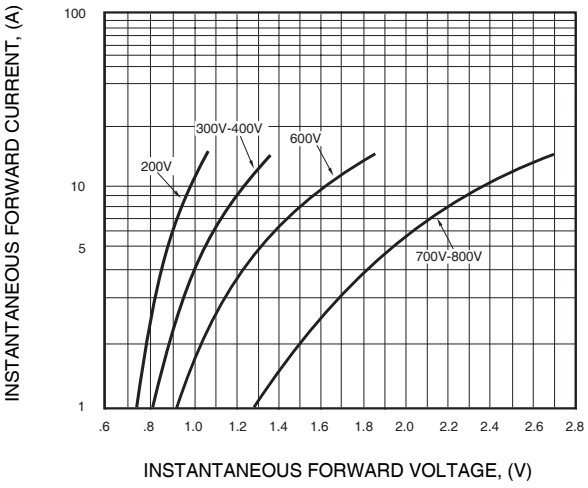
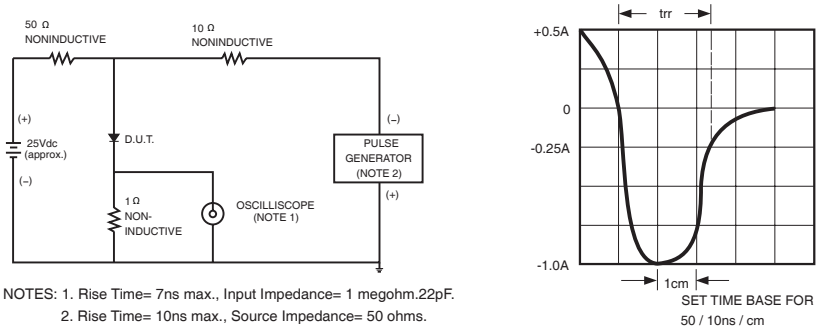
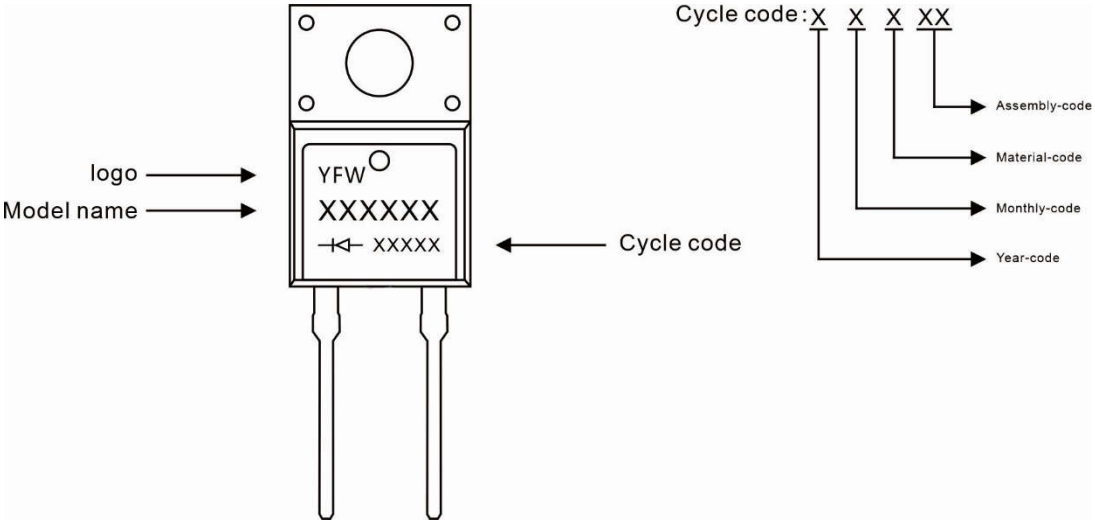


FIG.6- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

Marking Diagram

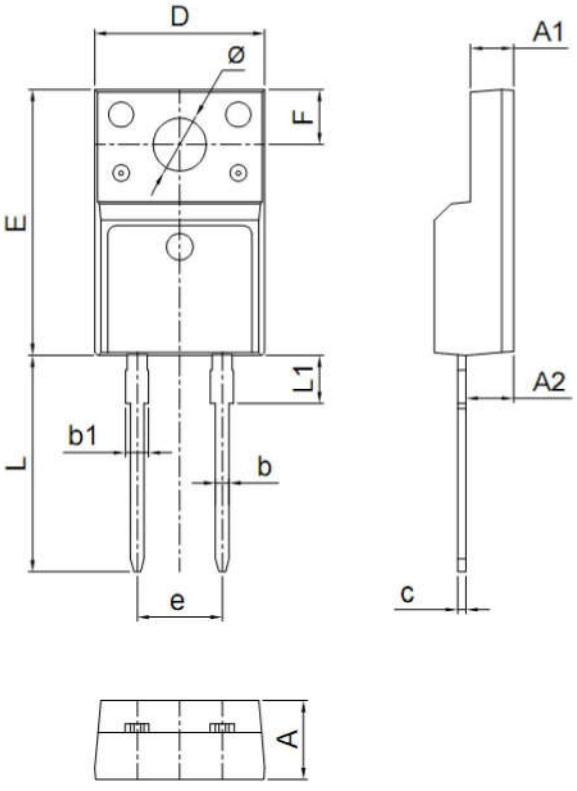


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
MURXXXXXDAF	TO-220FAC	0.06oz(1.7g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

Package Dimensions

TO-220FAC



Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.66	2.86	0.105	0.113
b	0.75	0.85	0.030	0.033
b1	1.24	1.44	0.049	0.057
c	0.40	0.60	0.016	0.024
D	10.00	10.32	0.394	0.406
E	15.75	16.05	0.620	0.632
e	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	12.90	13.50	0.508	0.531
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130

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