Ultra-Fast Recovery Rectifier Diodes

Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Adopt GPP chip
- Passivation for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

- Package: ITO-220AB
 Molding compound meets UL 94 V-0 flammability
- rating, RoHS-compliant • Terminals: Tin plated leads, solderable per
- J-STD-002 and JESD22-B102
- Polarity: As marked

■Maximum Ratings (Ta=25°C Unless otherwise specified)

PIN1

PIN2

PIN3

PARAMETER	SYMBOL	UNIT	MUR2040FCT-B1-0000S	MUR2060FCT-B1-0000S
Device marking code			MUR2040FCT	MUR2060FCT
Repetitive Peak Reverse Voltage	VRRM	V	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	lo	А		20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25°C	IFSM	А		125
Current Squared Time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	l ² t	A ² s		65
Storage Temperature	Tstg	Ĉ	-55	~ +150
Junction Temperature	Тј	Ĉ	-55	~ +150

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR2040FCT-B1-0000S	MUR2060FCT-B1-0000S
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=10.0A	1.3	1.5
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1		VRM=VRRM T _a =25℃	10	
	IRRM2	uA	VRM=VRRM T _a =125℃	500	
Reverse Recovery Time	Trr	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A	50	

■Thermal Characteristics (Ta=25°C Unless otherwise specified)

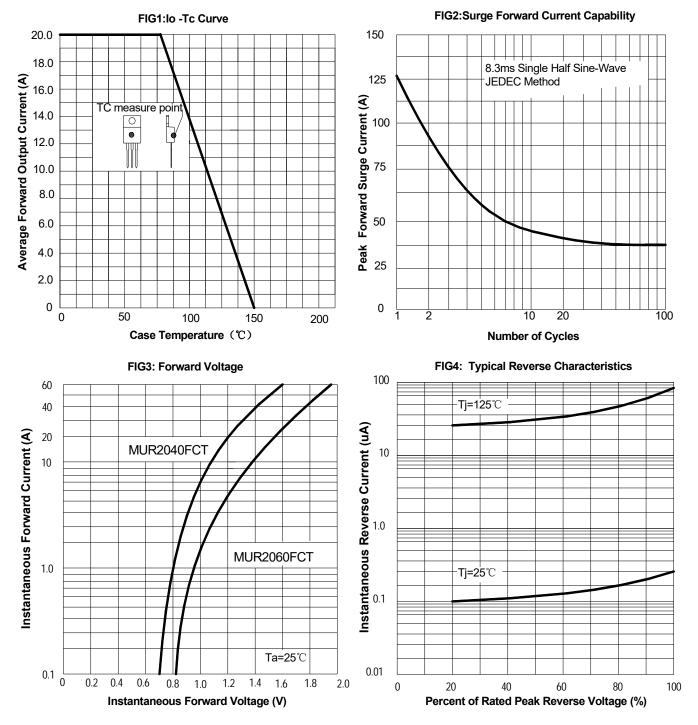
PARAMETER		SYMBOL	UNIT	MUR2040FCT-B1- 0000S	MUR2060FCT-B1- 0000S
Thermal Resistance	Between junction and case	$R_{_{ ext{ hetaJ-C}}}$	°C /W	2	.5

MUR2040FCT THUR MUR2060FCT-B1-0000S

■Ordering Information (Example)

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PREFER	ED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR2040FCT-B1- 0000S	MUR2060FCT-B1- 0000S	Approximate 1.49	50	1000	5000	Tube

■Characteristics (Typical)





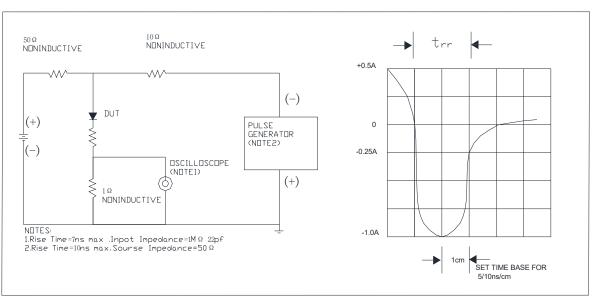
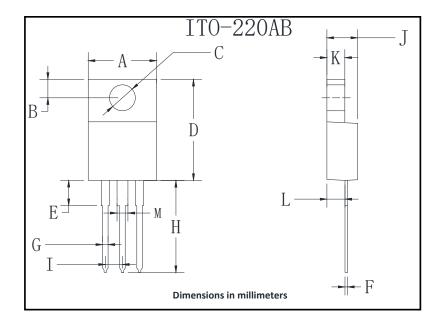


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time

Outline Dimensions



ITO-220AB					
Dim	Min	Max			
А	9.7	10.7			
В	2.15	3.25			
С	2.6	3.8			
D	14.4	15.9			
E	3.1	4.5			
F	0.4	0.8			
G	0.4	0.8			
Н	12.7	14.2			
I	1.80	2.95			
J	3.9	5.1			
К	2.1	3.56			
L	2.1	3.2			
М	1.4	1.8			

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