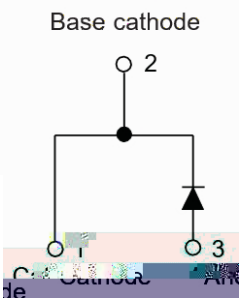
Ultra-Fast Recovery Diodes 60A FRED





Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring 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**: TO-247AC
  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

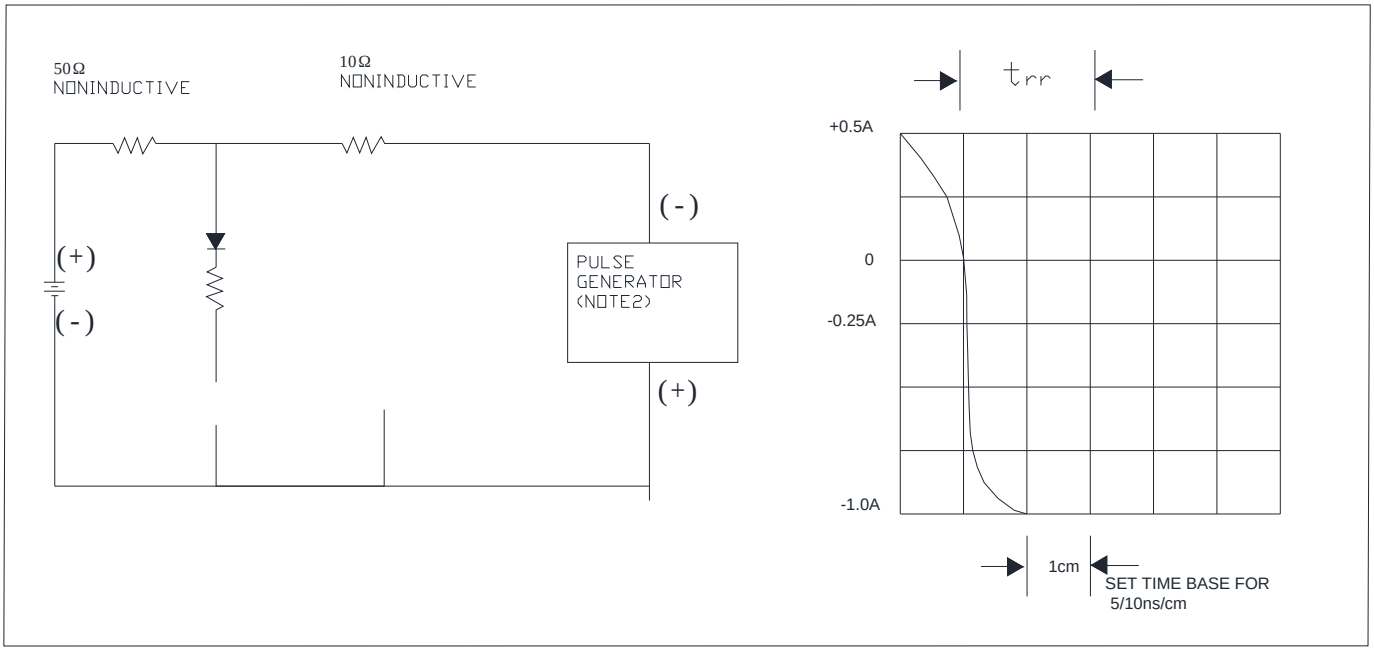
■Maximum Ratings (Tj=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	MUR6040P
Device marking code			MUR6040P
Repetitive Peak Reverse Voltage	V_{RRM}	V	400
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	Io	A	60
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Tj=25	I_{FSM}	A	500
Current Squared Time @1ms≤t≤8.3ms Tj=25	I^2t	A^2s.	1037
Single Pulse Avalanche Energy @ Tj=25 ,L=15mH	E_{AS}	mJ	670
Storage Temperature	Tstg		-55 ~ +175
Junction Temperature	Tj		-55 ~ +175
Typical Junction capacitance @4V,1MHz	Cj	pF	245

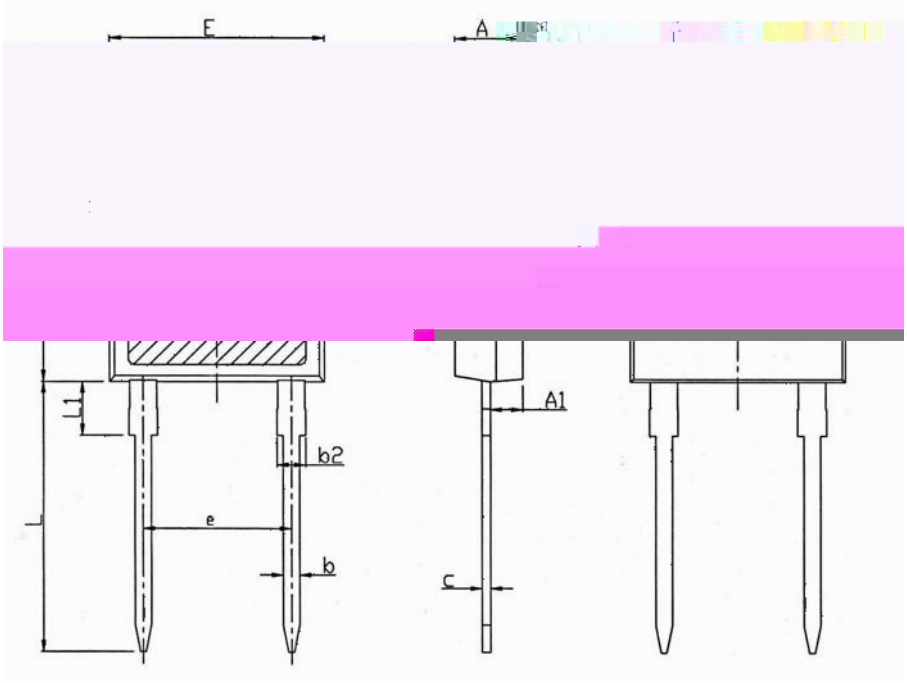
■**Electrical Characteristics** Tj=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=60.0A Tj=25			

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



■Outline Dimensions



TO-247AC		
Dim	Min	Max
A	4.80	5.20
A1	2.21	2.61
A2	1.85	2.15
b	1.11	1.36
b2	1.91	2.21
c	0.51	0.75
D	20.70	21.30
D1	16.25	16.85
E	15.50	16.10
E1	13.00	13.60
E2	4.80	5.20
E3	2.30	2.70
e	10.88BSC	
L	19.62	20.22
L1	-	4.30
φ P	3.40	3.80
φ P1	-	7.30
S	6.15BSC	

Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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