



## Ultra-Fast Recovery Diodes 10A\*2 FRED

### Features

Ä Adopt FRED chip

- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

### 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:**



# MUR2040FCT

## Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	$V_{FM}$	V	$I_{FM}=10.0A @ T_j=25$	-	1.15	1.30
			$I_{FM}=10.0A @ T_j=150$		0.9	1.0
DC reverse current at rated DC blocking voltage per diode	$I_{RRM1}$	uA	$V_{RM}=V_{RRM}$ $T_j=25$	-	-	5
	$I_{RRM2}$		$V_{RM}=V_{RRM}$ $T_j=150$	-	40	100
Reverse Recovery Time	$T_{rr}$	ns	$I_F=0.5A$ $I_{RM}=1A$ $I_{RR}=0.25A$ $T_j=25$	-	25	35
			$T_j=25$	-	33.5	-
			$T_j=125$	-	54.8	-
Peak recovery current	$I_{RRM}$	A	$T_j=25$	-	4.1	-
			$T_j=125$			
Reverse recovery charge	$Q_{rr}$	nC	$T_j=25$	-	68.3	-
			$T_j=125$	-	226.7	-

## Thermal Characteristics $T_j=25$ Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MUR2040FCT
Thermal Resistance	Between junction and case	R J-C	$^{\circ}W$	5.0
Thermal Resistance	Between junction and Air	R J-A	$^{\circ}W$	50

## Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR2040FCT	Approximate 1.6	50	1000	5000	Tube

## Characteristics (Typical)

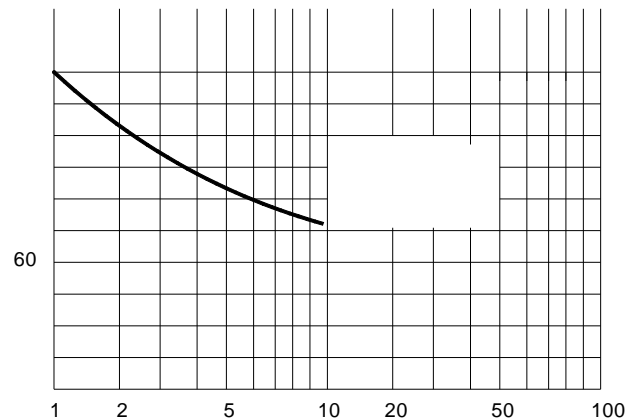
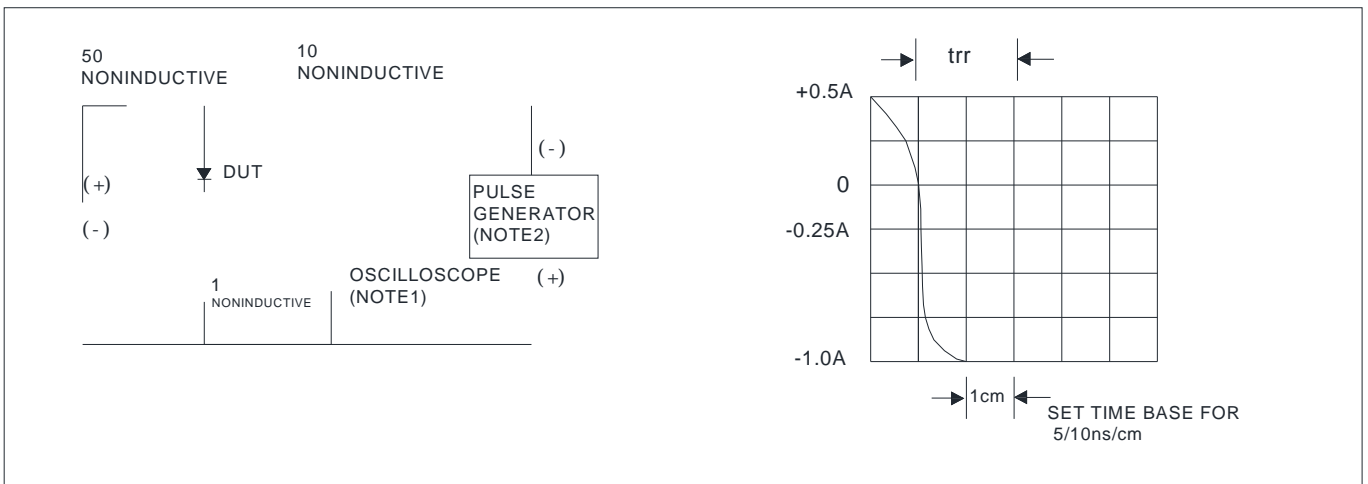


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time







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## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary M ed e ab ation