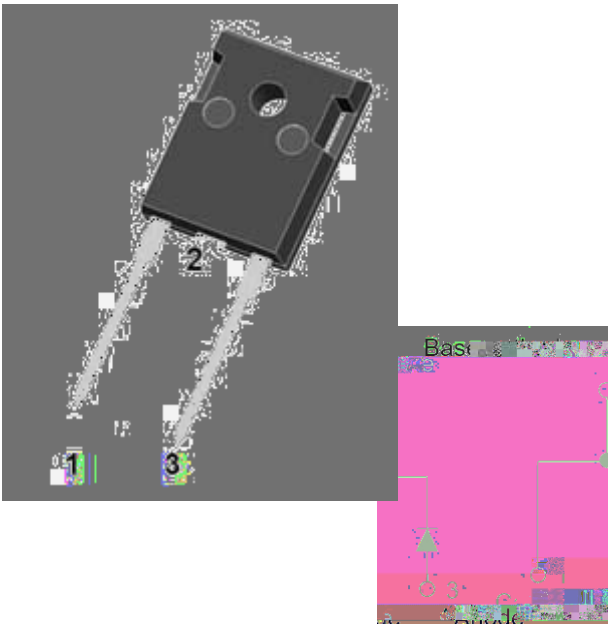


Ultra-Fast Recovery Diodes 60A FRED



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 (T_j=25 °C Unless otherwise

Repetitive Peak Reverse Voltage	V _{RRM} /V _{RRM}	Itse	T	A
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Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _j =25 °C, L=15mH	EAS	mJ	900	lanche Energy @ T
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Storage Temperature	T _{stg}		-55 ~ +175
Junction Temperature	T _j		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C _j	pF	392



MUR6060P

Electrical Characteristics $T_j=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =60.0A T _j =25	-	1.8	2.4
DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	uA	V _{RM} =V _{RRM} T _j =25	-	-	5.0
	I _{RRM2}		V _{RM} =V _{RRM} T _j =125	-	-	200
Reverse Recovery Time	T _{rr}	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A T _j =25	-	50	75
			T _j =25	-	69.78	-
			T _j =125	-	101.20	-
Peak recovery current	I _{RRM}	A	T _j =25	-	4.540	-
			T _j =125	I _F =30A di/dt=-200A/us V _{RM} =200V	-	10.98
Reverse recovery charge	Q _{rr}	nC	T _j =25	-	158.44	-
			T _j =125	-	555.70	-

Thermal Characteristics $T_j=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	MUR6060P
Thermal Resistance Between junction and case	R _{J-C}	W	1.0

Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR6060P	Approximate 6.0	30	360	1800	Tube

Characteristics (Typical)

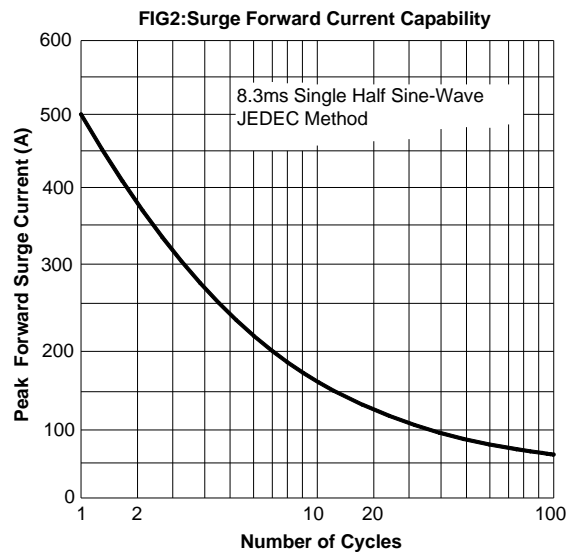
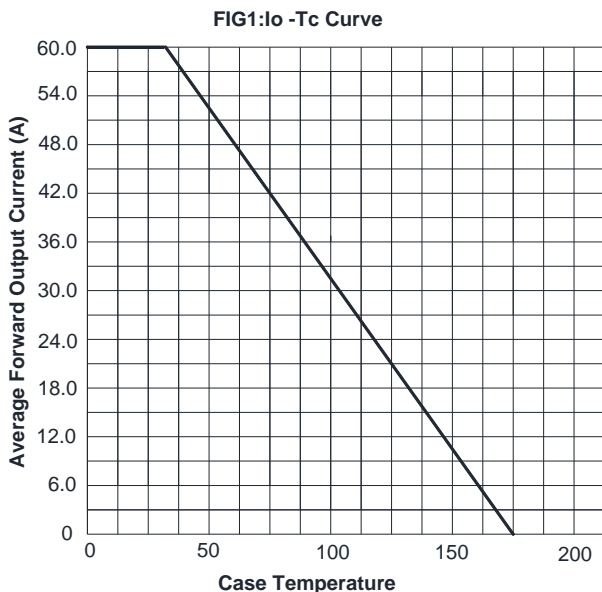
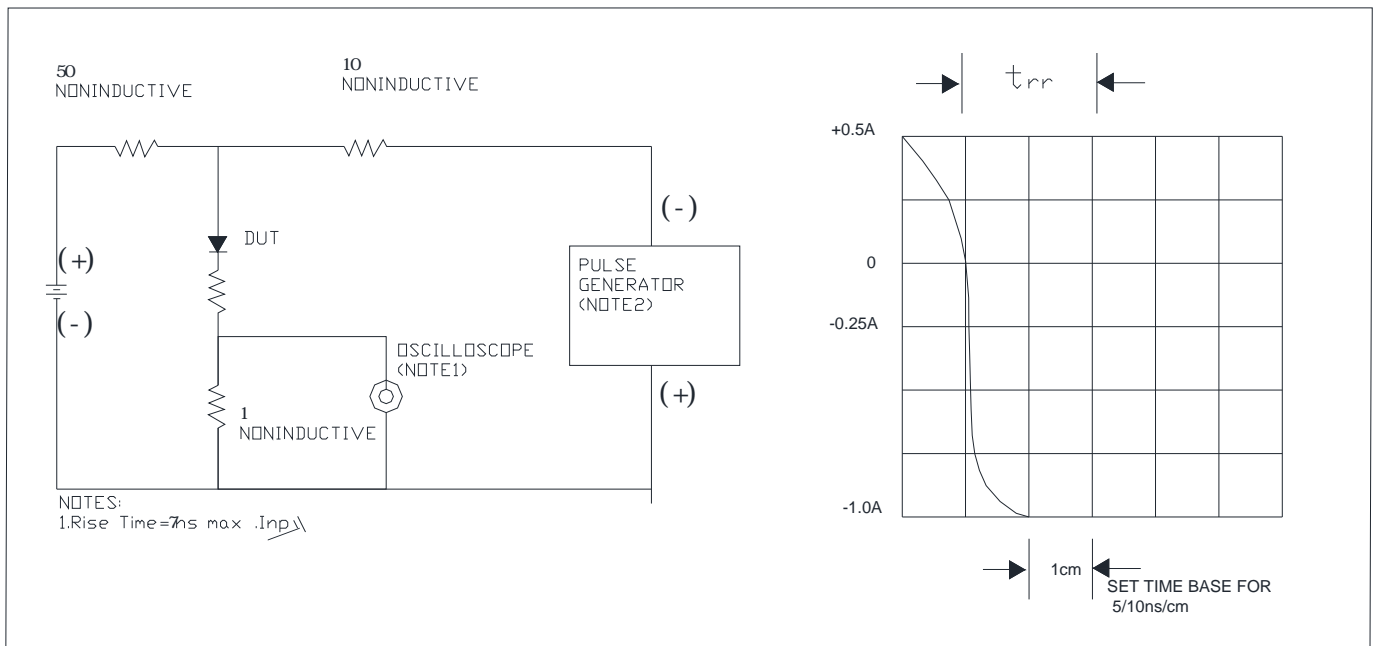


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time







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