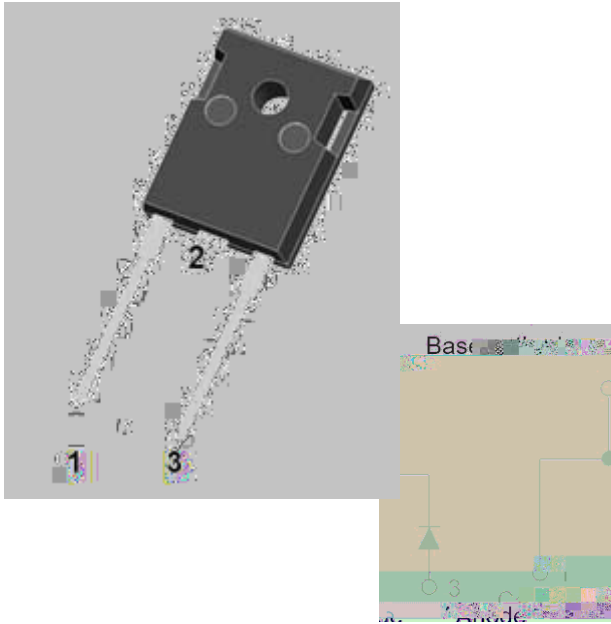


Ultra-Fast Recovery Diodes 60A FRED



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	60	175	A
---------------------------------	---------------------	----	-----	---

Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _j =25 °C, L=15mH	I _{FSM} /A	60	175	900
---	---------------------	----	-----	-----

Storage Temperature	T _{stg}	-55 ~ +175
Junction Temperature	T _j	-55 ~ +175
Typical Junction capacitance @4V,1MHz	C _j	392 pF



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	-	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 _{θJ-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)

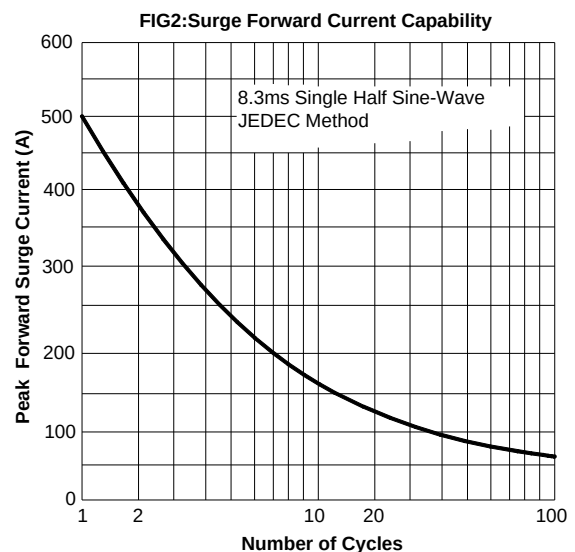
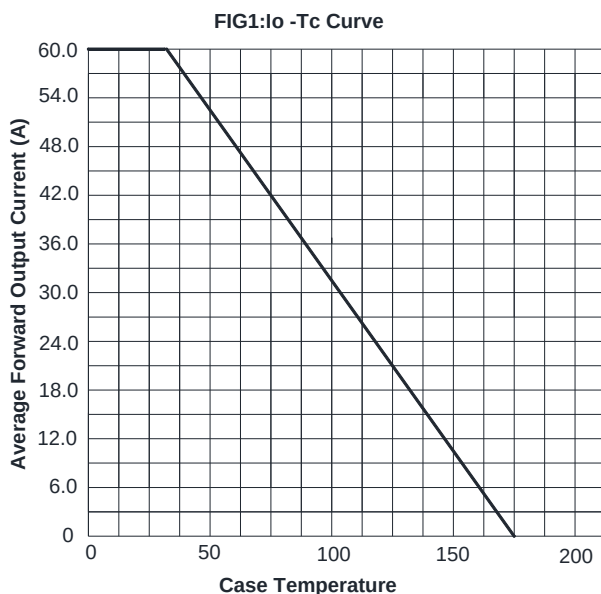
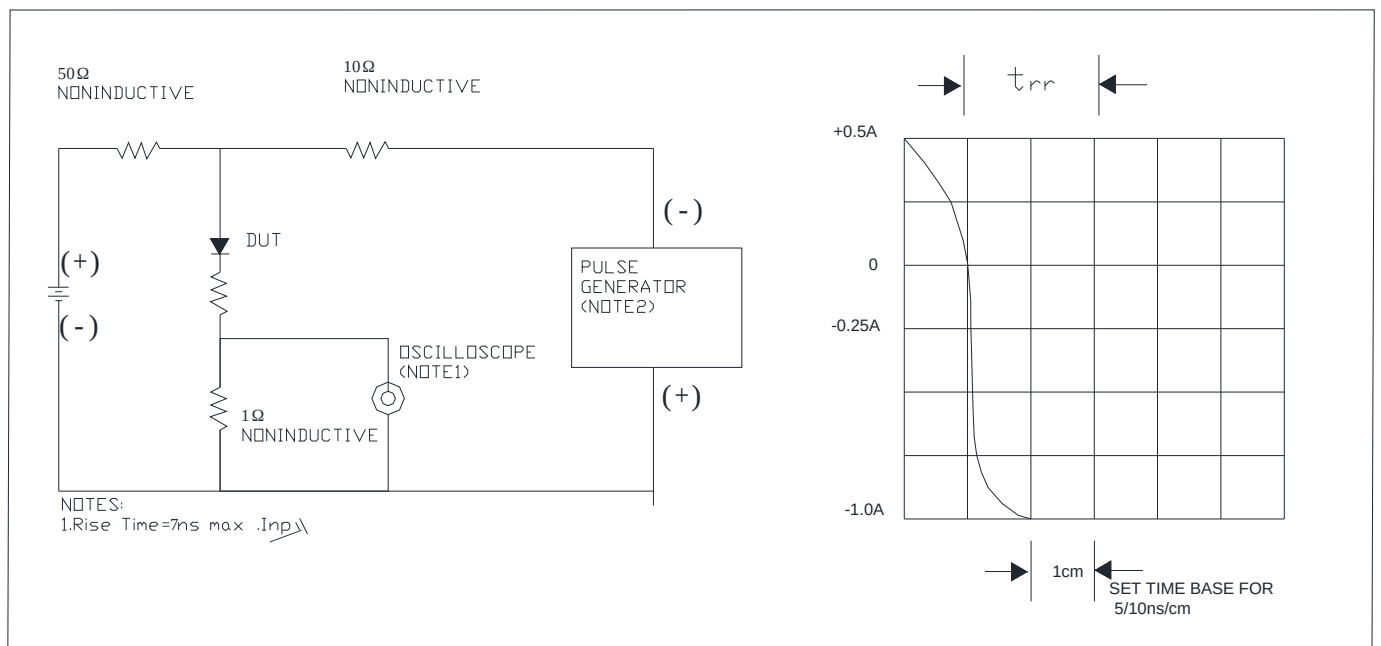


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time







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 electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which 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 " & I y