

Features

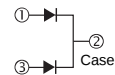
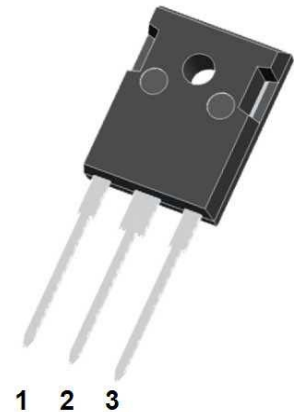
- Adopt FRD chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

Typical Applications

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

Mechanical Data

- **Package:** TO-247
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 ($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

TYPE	V_{RSM} V	V_{RRM} V
MUR2060PT	600	600

PARAMETER	SYMBOL	UNIT	MUR2060PT
Device marking code			MUR2060PT
Repetitive Peak Reverse Voltage	V_{RRM}	V	600
Average Rectified Output Current @60Hz sine wave, R-load, T_C (FIG.1)	I_O	A	20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_J=25^{\circ}\text{C}$	I_{FSM}	A	240
Current Squared Time @1ms≤t≤8.3ms $T_J=25^{\circ}\text{C}$,	I^2t	A^2s	93
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~ +175
Junction Temperature	T_J	$^{\circ}\text{C}$	-55 ~ +175
Typical Junction capacitance @4V,1MHz	C_j	pF	92
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8

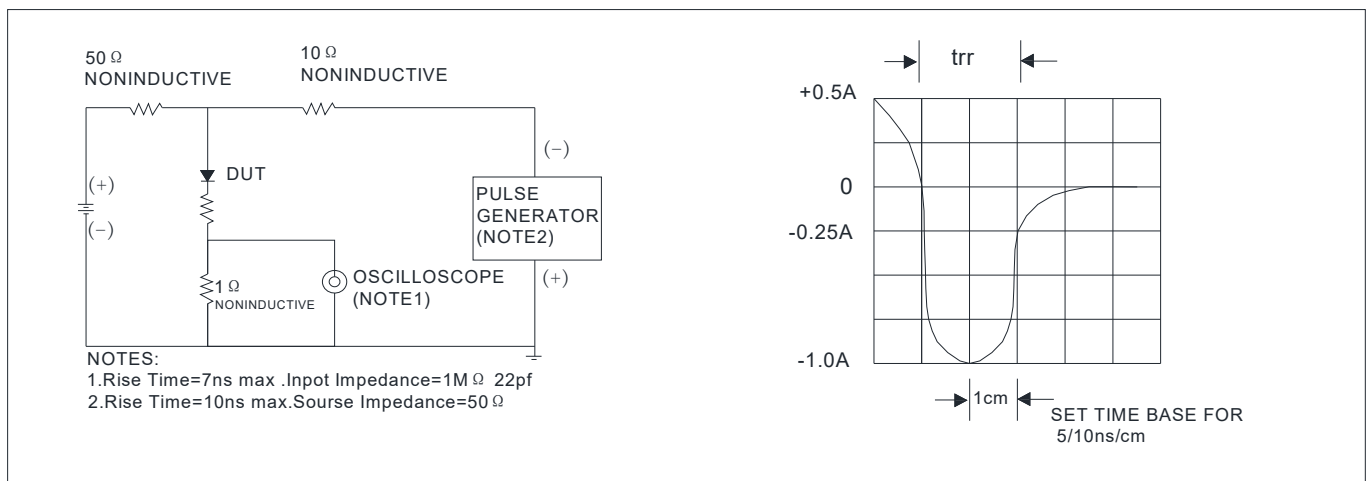
■Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V_{FM}	V	IFM=10.0A @Tj=25°C	-	1.6	1.8
			IFM=10.0A @Tj=150°C	-	1.5	-
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	μA	VRM=VRRM Tj=25°C	-	-	10
	I_{RRM2}		VRM=VRRM Tj=150°C	-	30	200
Reverse Recovery Time	T_{rr}	ns	IF=0.5A I _{RM} =1A IRR=0.25A Tj=25°C	-	35	50
			Tj=25°C	-	37.45	-
			Tj=125°C	-	69.15	-
Peak recovery current	I_{RRM}	A	Tj=25°C	-	2.45	-
			Tj=125°C	-	5.75	-
Reverse recovery charge	Q_{rr}	nC	Tj=25°C	-	74.62	-
			Tj=125°C	-	200.70	-

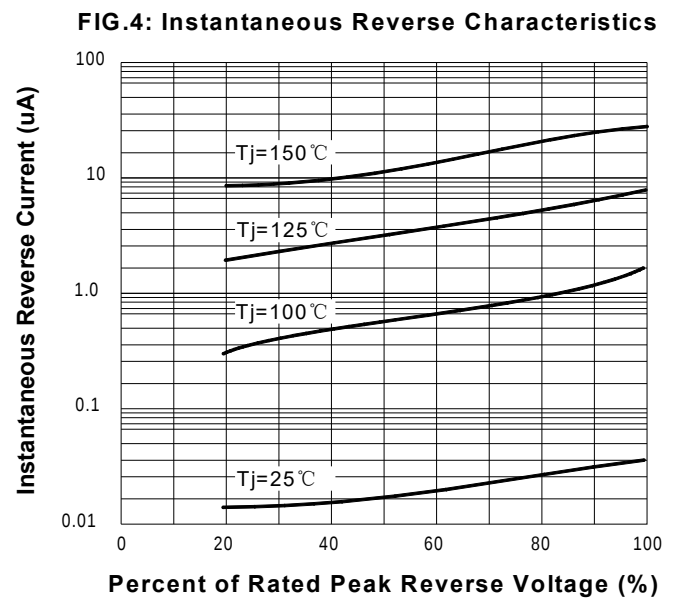
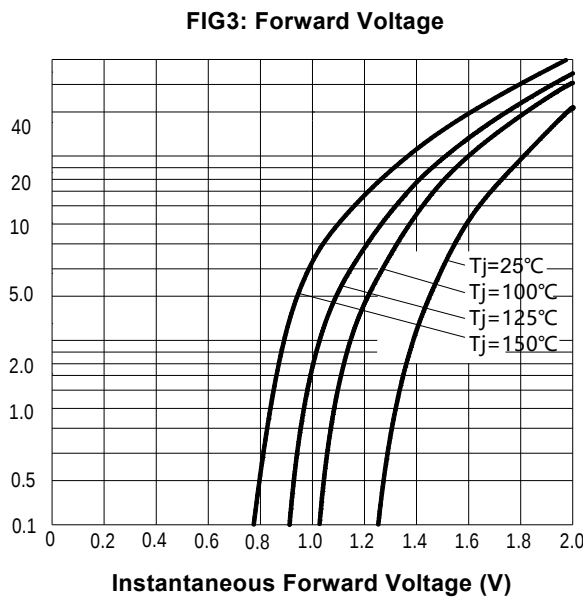
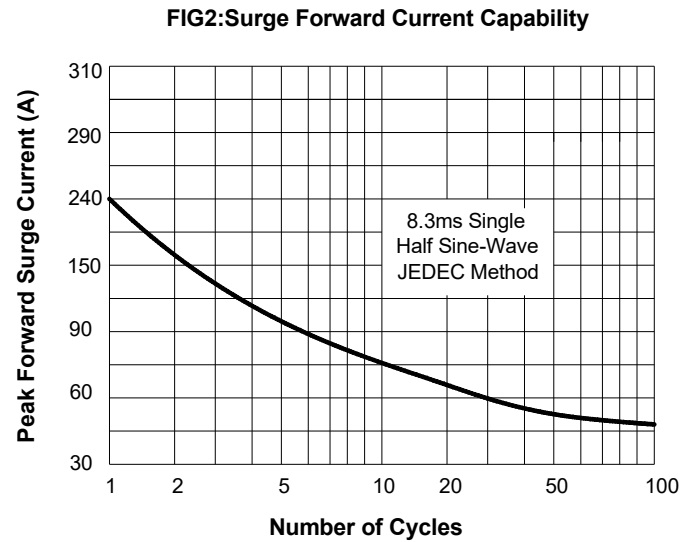
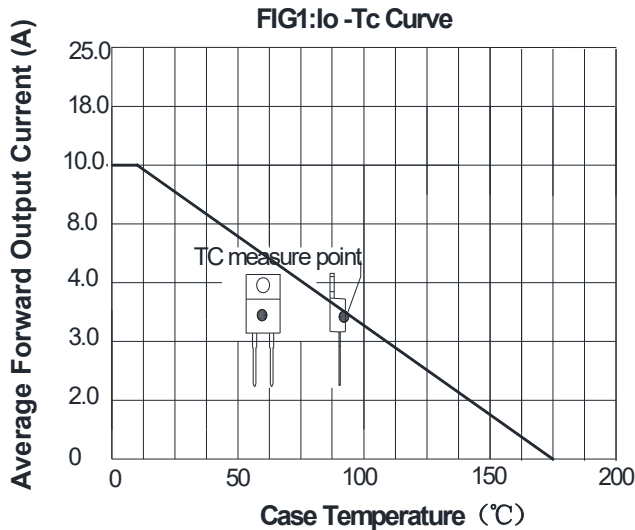
■Thermal Characteristics (Tj=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MUR2060PT
Thermal Resistance	Between junction and case	R θ J-C	°C/W	4.0
Thermal Resistance	Between junction and Air	R θ J-A	°C/W	50

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



■ Characteristics (Typical)



■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR2060PT	Approximate 1.6	50	1000	5000	Tube