

Features

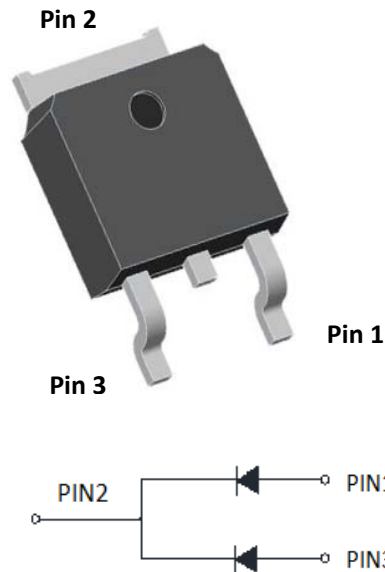
- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

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

Mechanical Data

- **Package:** TO-252
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)

PARAMETER	SYMBOL	UNIT	MUR2060DCT
Device marking code			MUR2060DCT
Repetitive Peak Reverse Voltage	VRRM	V	600
Average Rectified Output Current @60Hz half sine-wave, R-load, T_c (FIG.1)	I_o	A	20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a=25^\circ\text{C}$	IFSM	A	200
Current Squared Time @1ms≤t≤8.3ms $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A ² s	65
Storage Temperature	Tstg	°C	-55 ~ +175
Junction Temperature	T_j	°C	-55 ~ +175

■Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR2060DCT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=10.0A	1.60
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	uA	VRM=VRRM $T_a=25^\circ\text{C}$	10
	IRRM2		VRM=VRRM $T_a=125^\circ\text{C}$	500
Reverse Recovery Time	Trr	ns	IF=0.5A I _{RM} =1A I _{RR} =0.25A	28

■Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR2060DCT
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	°CW
			2.5

■ Characteristics (Typical)

FIG1: I_o - T_c Curve

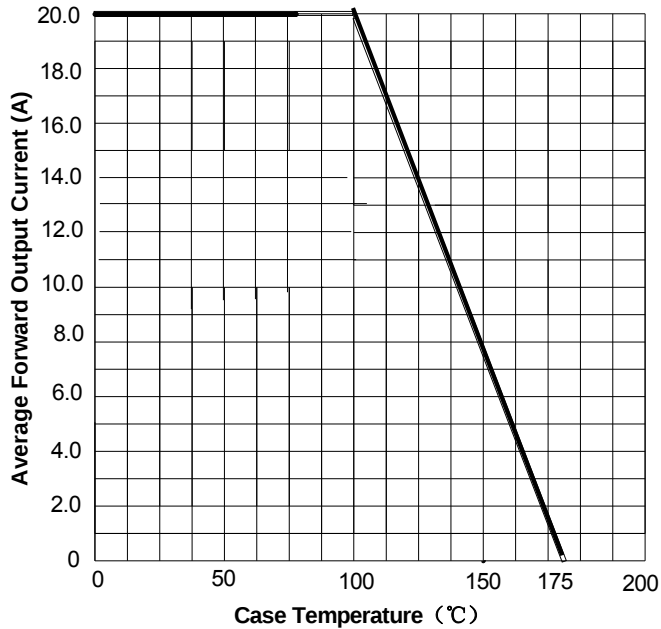


FIG2: Surge Forward Current Capability

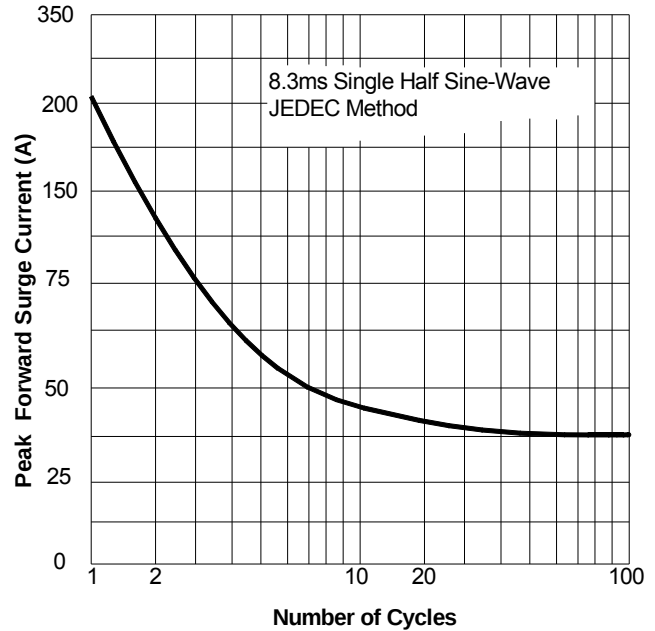


FIG3: Forward Voltage

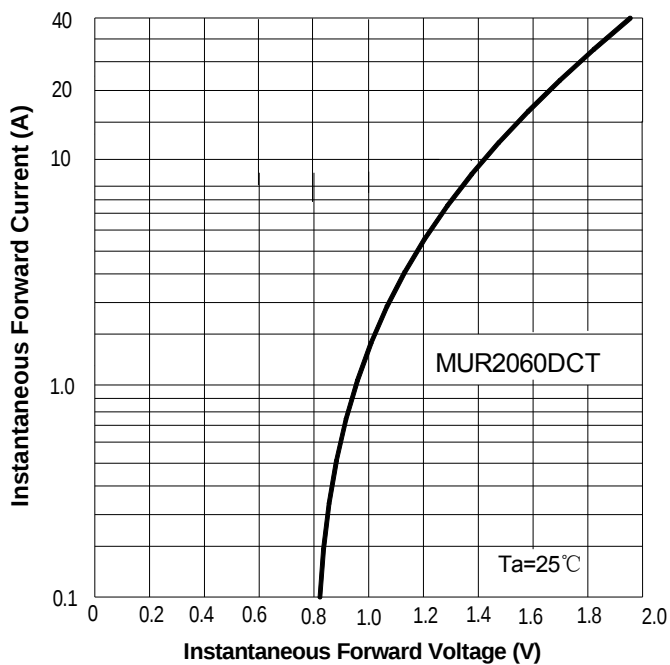


FIG4: Typical Reverse Characteristics

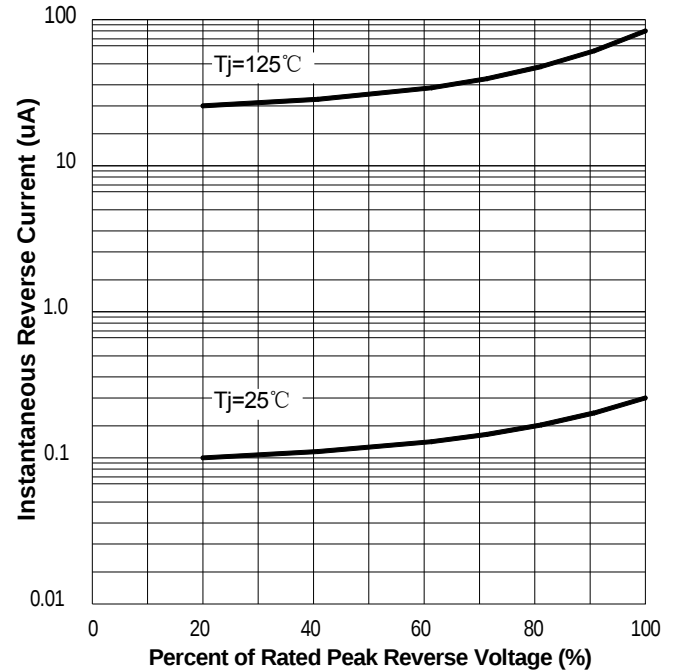
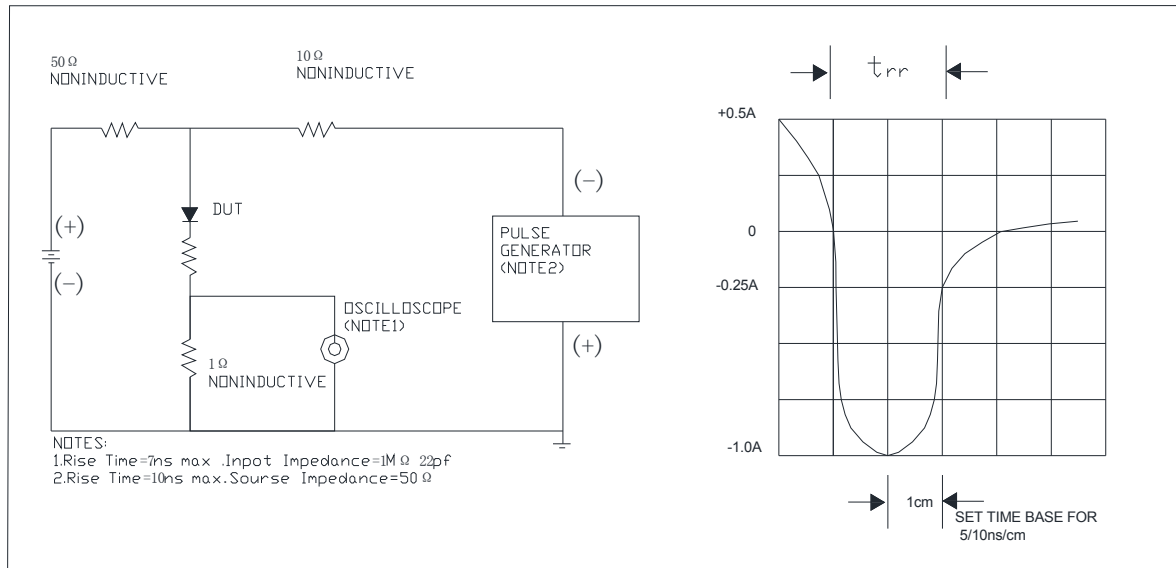
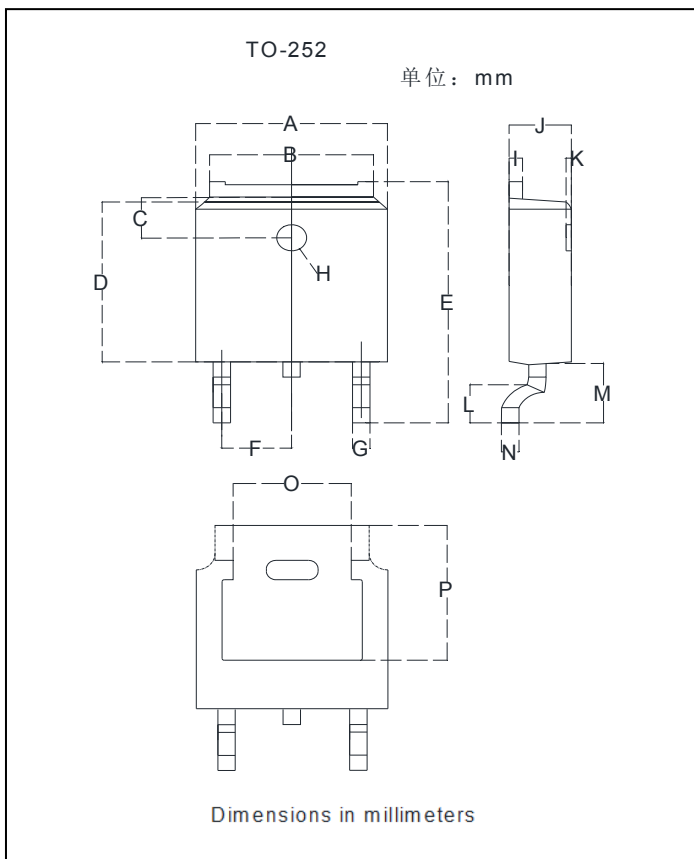


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time



Outline Dimensions



TO-252		
Dim	Min	Max
A	6.500	6.700
B	5.100	5.460
C	1.400	1.800
D	6.000	6.200
E	10.000	10.400
F	2.166	2.366
G	0.660	0.860
H	$\Phi 1.05$	$\Phi 1.35$
I	0.460	0.580
J	2.200	2.400
K	0	0.300
L	0.890	2.290
M	2.730	3.080
N	0.430	0.580
O	4.2	4.95
P	5.15	5.45

Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR2060DCT	Approximate 1.49	50	1000	5000	Tube