

TO-252 Surface Mount Fast Recovery Rectifier

Features

- Low profile package
- Ideal for automated placement
- Glass passivated pallet chip junction
- Fast reverse recovery time
- Fast switching for high efficiency
- High forward surge capability

Applications

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive, and telecommunication

Mechanical Data

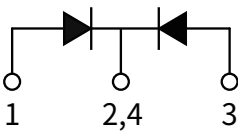
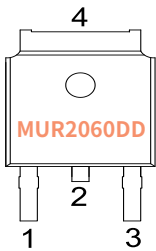
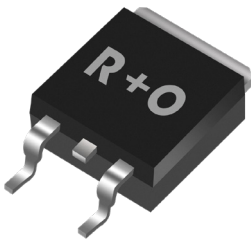
- Case: TO-252
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026

Function Diagram

Reverse Voltage
600 V

Forward Current
20 Ampere

TO-252



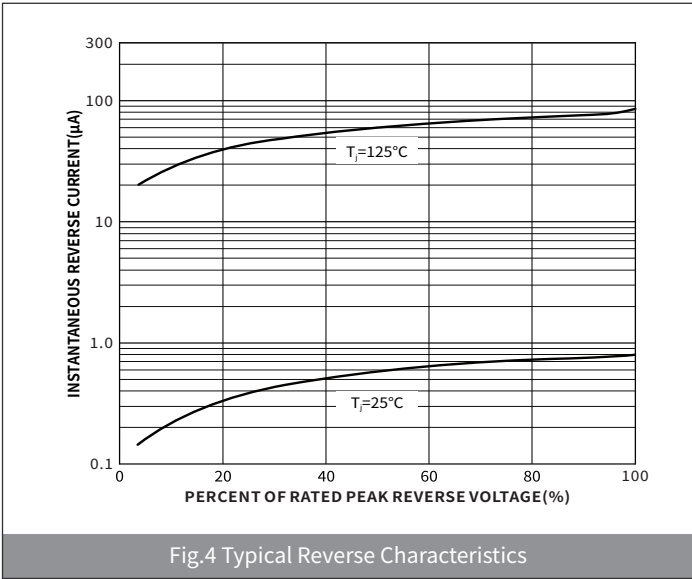
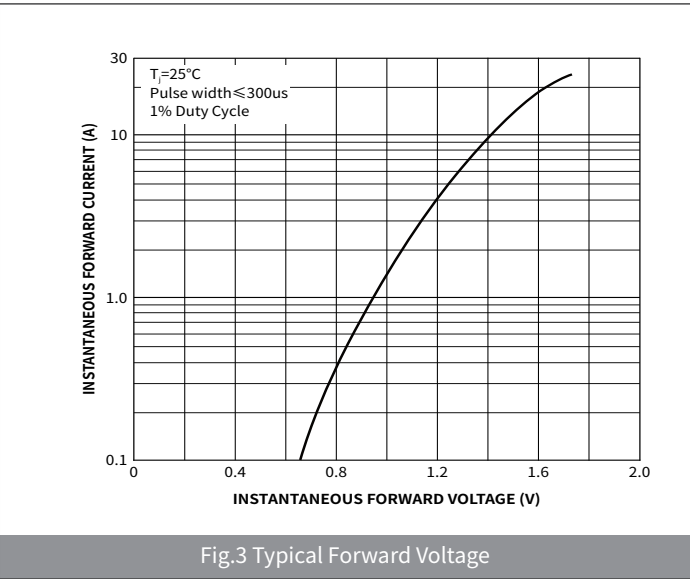
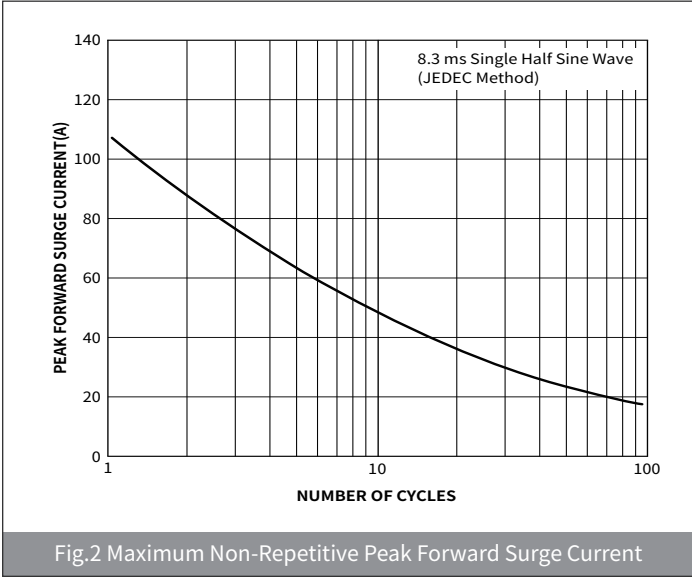
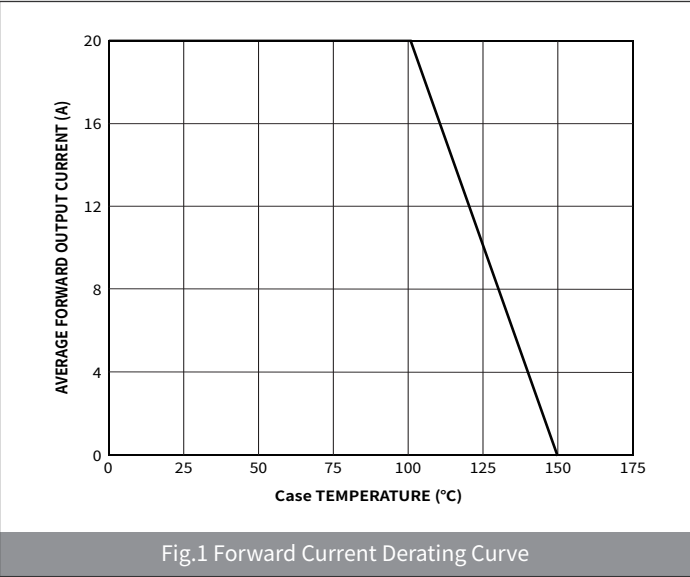
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MUR2060DD
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	600
Maximum RMS Voltage		V_{RMS}	V	420
Maximum DC blocking Voltage		V_{DC}	V	600
Maximum Average Forward Rectified Current	Per Leg	$I_{F(AV)}$	A	10
	Total			20
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave		I_{FSM}	A	110
Storage temperature		T_{stg}	°C	-55 ~ +150
Junction temperature		T_j	°C	-55 ~ +150
Typical Thermal Resistance		$R_{\theta J-C}$	°C /W	5

● **Electrical Characteristics** (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	MIN	TYP	MAX
Maximum instantaneous forward voltage	I _F =3A	V _F	V	—	1.2	—
	I _F =5A			—	1.3	—
	I _F =10A			—	1.4	1.6
Maxinum reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	T _{rr}	ns	—	—	35
Maximum DC reverse currentat rated DC blocking voltage	V _R =V _{DC} , T _J =25°C	I _{R1}	μA	—	0.1	1.0
	V _R =V _{DC} , T _J =125°C	I _{R2}		—	—	200

● **Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)



● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
TO-252	R3	0.305	2500	5000	35000	13"

● Package Outline Dimensions (TO-252)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A2	0.90	1.10	0.035	0.043
b	0.66	0.86	0.026	0.034
b1	5.10	5.50	0.201	0.216
b2	4.27	4.37	0.168	0.172
b3	0.78	0.90	0.031	0.035
c	0.40	0.60	0.016	0.024
D	5.90	6.30	0.232	0.248
D1	5.35 REF.		0.211 REF.	
E	6.30	6.70	0.248	0.264
E1	4.83 REF.		0.190 REF.	
e	2.18	2.38	0.086	0.094
H	9.80	10.4	0.386	0.409
L1	2.70	3.10	0.106	0.122
L3	0.80	1.20	0.031	0.047
L4	0.60	1.00	0.024	0.039
L5	1.8 REF.		0.071 REF.	
L6	-	0.12	-	0.005

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
a	3.70	-	0.146	-
b	4.37	-	0.172	-
X	-	5.80	-	0.228
X1	-	1.20	-	0.047
Y	-	5.85	-	0.230
Y1	-	2.00	-	0.079