

## DIODE(NON-ISOLATED TYPE)

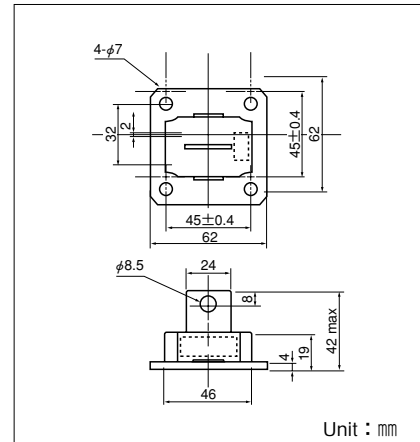
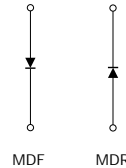
# MDF(R)250A

MDF(R)250A is a diode with flat mounting base which is designed for use in various rectifier applications.

- $I_{F(AV)}=250A$ ,  $V_{RRM}=500V$
- Easy Construction with Anode(F) Type and Cathode(R) type.
- High reliability by glass passivation

### (Applications)

Various Rectifiers  
Welding Power Supply



### Maximum Ratings

( $T_j=25^{\circ}C$  unless otherwise specified)

Symbol	Item	Ratings			Unit
		MDF(R)200A30	MDF(R)200A40	MDF(R)200A50	
$V_{RRM}$	Repetitive Peak Reverse Voltage	300	400	500	V
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	360	480	600	V
$V_{R(DC)}$	D.C. Reverse Voltage	240	320	400	V

Symbol	Item	Conditions	Ratings	Unit	
$I_{F(AV)}$	Average Forward Current	Single phase, half wave, 180° conduction, $T_c : 92^{\circ}C$	250	A	
$I_{F(RMS)}$	R.M.S. Forward Current	Single phase, half wave, 180° conduction, $T_c : 92^{\circ}C$	390	A	
$I_{FSM}$	Surge Forward Current	1/2 cycle, 50Hz/60Hz, peak value, non-repetitive	4000/4500	A	
$I^2t$	$I^2t$	Value for one cycle of surge current	84000	A <sup>2</sup> S	
$T_j$	Junction Temperature		-30 to +150	°C	
$T_{stg}$	Storage Temperature		-30 to +125	°C	
	Mounting Torque	Mounting (M6)	Recommended Value 2.5-3.9 (25-40)	4.7 (48)	N·m (kgf·cm)
		Terminal (M8)	Recommended Value 8.8-10 (90-105)	11 (115)	
	Mass			170	g

### Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
$I_{RRM}$	Repetitive Peak Reverse Current, max.	at $V_{DRM}$ , single phase, half wave, $T_j=150^{\circ}C$	15	mA
$V_{FM}$	Forward Voltage Drop, max.	Forward current 800A, $T_j=25^{\circ}C$ , Inst. measurement	1.15	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.2	°C/W

