

## DIODE(NON-ISOLATED TYPE)

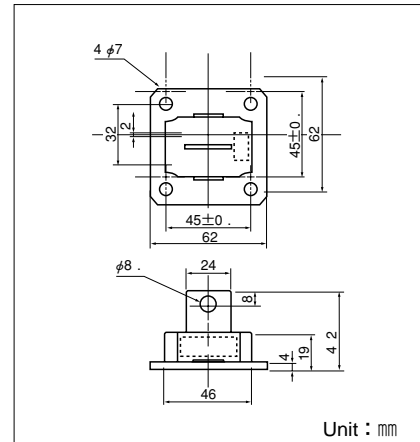
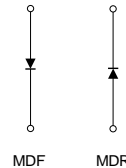
# MDF(R)150A

MDF(R)150A is a diode with flat mounting base which is designed for use in various rectifier applications.

- $I_{F(AV)} = 150A$ ,  $V_{RRM} = 500V$
- Easy Construction with Anode (F) Type and Cathode (R) type.
- High reliability by glass passivation

### (Applications)

Various Rectifiers  
Welding Power Supply



### Maximum Ratings

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

Symbol	Item	Ratings			Unit
		MDF(R)150A30	MDF(R)150A40	MDF(R)150A50	
$V_{RRM}$	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, $180^\circ$ conduction, $T_c : 98^\circ\text{C}$	150	A	
$I_{F(RMS)}$	R.M.S. Forward Current	Single phase, half wave, $180^\circ$ conduction, $T_c : 98^\circ\text{C}$	235	A	
$I_{FSM}$	Surge Forward Current	$\frac{1}{2}$ cycle, 50Hz/60Hz, peak value, non-repetitive	2700/3000	A	
$I^2t$	$I^2t$	Value for one cycle of surge current	37500	$\text{A}^2\text{S}$	
$T_j$	Junction Temperature		$-30$ to $+150$	$^\circ\text{C}$	
$T_{stg}$	Storage Temperature		$-30$ to $+125$	$^\circ\text{C}$	
	Mounting Torque	Mounting (M6)	Recommended Value 2.5-3.9 (25-40)	4.7 (48)	$\text{N}\cdot\text{m}$ ( $\text{kgf}\cdot\text{cm}$ )
		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, $T_j = 150^\circ\text{C}$	10	mA
$V_{FM}$	Forward Voltage Drop, max.	Forward current 470A, $T_j = 25^\circ\text{C}$ , Inst. measurement	1.15	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.3	$^\circ\text{C}/\text{W}$

