

# **DIODE MODULE**

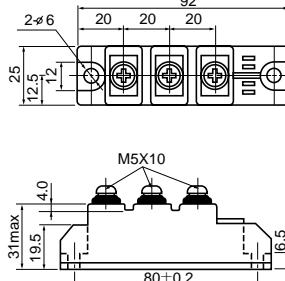
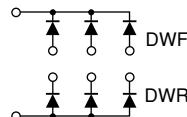
# **DWF(R)70A30/40**

**DWF(R)70A** is a non-isolated diode module designed for 3 phase rectification.

- $I_F(AV) = 70A$ ,  $V_{RRM} = 400V$
  - Easy Construction with Joint-Cathode (F) Type and Joint-Anode (R) type.
  - Non-isolated. (Mounting Base as terminals.)
  - High Surge Capability

## (Applications)

## Welding Power Supply 3 Phase Rectifier



Unit : mm

## ■ Maximum Ratings

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

Symbol	Item	Ratings		Unit
		DWF(R)70A30	DWF(R)70A40	
$V_{RRM}$	Repetitive Peak Reverse Voltage	300	400	V
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	360	480	V
$V_{R(DC)}$	D.C. Reverse Voltage	240	320	V

Symbol	Item	Conditions	Ratings	Unit
I <sub>F(AV)</sub>	Average Forward Current	Single phase, half wave, 180° conduction, T <sub>c</sub> : 119°C	70	A
I <sub>F(RMS)</sub>	R.M.S. Forward Current	Single phase, half wave, 180° conduction, T <sub>c</sub> : 119°C	110	A
I <sub>FSM</sub>	Surge Forward Current	½cycle, 60Hz, peak value, non-repetitive	1400	A
I <sup>2</sup> t	I <sup>2</sup> t	Value for one cycle of surge current	8100	A <sup>2</sup> S
T <sub>j</sub>	Operating Junction Temperature		-30 to +150	°C
T <sub>stg</sub>	Storage Temperature		-30 to +125	°C
Mounting Torque	Mounting (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (48)	N·m (kgf·cm)
	Terminal (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (48)	
	Mass		170	g

## ■ Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I <sub>RRM</sub>	Repetitive Peak Reverse Current, max.	at V <sub>DRM</sub> , single phase, half wave, T <sub>j</sub> =150°C	12	mA
V <sub>FM</sub>	Forward Voltage Drop, max.	Forward current 220A, T <sub>j</sub> =25°C, Inst. measurement	1.15	V
R <sub>th(j-c)</sub>	Thermal Impedance, max.	Junction to case	0.40	°C/W

