

MITSUBISHI DIODE MODULES

**RM15TC-40**

**HIGH VOLTAGE MEDIUM POWER GENERAL USE  
INSULATED TYPE**

RM15TC-40



- **Io** DC output current ..... **30A**
- **VRRM** Repetitive peak reverse voltage  
..... **2000V**

- **3 phase bridge**
- **Insulated Type**
- **UL Recognized**

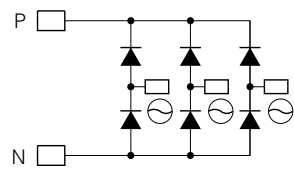
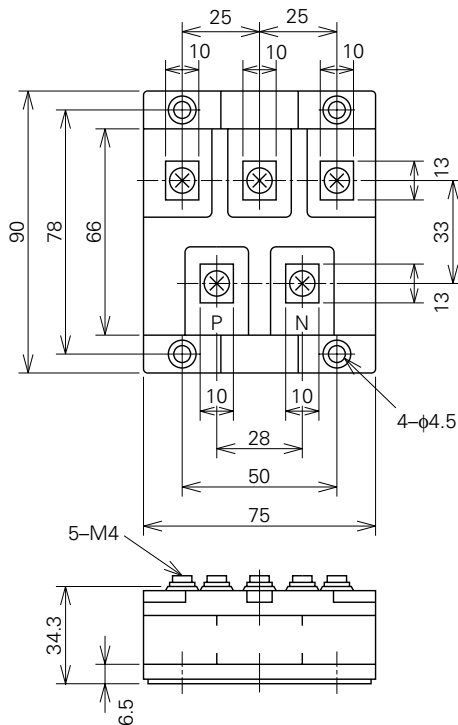
Yellow Card No. E80276 (N)  
File No. E80271

**APPLICATION**

AC motor controllers, DC motor controllers, Battery DC power supplies,  
DC power supplies for control panels, and other general DC power equipment

**OUTLINE DRAWING & CIRCUIT DIAGRAM**

Dimensions in mm



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## INSULATED TYPE

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Voltage class	Unit
		40	
VRRM	Repetitive peak reverse voltage	2000	V
VRSM	Non-repetitive peak reverse voltage	2100	V
Ea	Recommended AC input voltage	575	V

Symbol	Parameter	Conditions	Ratings	Unit
Io	DC output current	Three-phase full wave rectifying circuit, Tc=103°C	30	A
IFSM	Surge (non-repetitive) forward current	One half cycle at 60Hz, peak value	500	A
I <sup>2</sup> t	I <sup>2</sup> t for fusing	Value for one cycle of surge current	1.0 × 10 <sup>3</sup>	A <sup>2</sup> s
f	Maximum operating frequency		1000	Hz
Tj	Junction temperature		-40~+125	°C
Tstg	Storage temperature		-40~+125	°C
Viso	Isolation voltage	Charged part to case	3000	V
—	Mounting torque	Main terminal screw M4	0.98~1.47	N·m
			10~15	kg·cm
		Mounting screw M6	0.98~1.47	N·m
			10~15	kg·cm
—	Weight	Typical value	405	g

## ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
IRRM	Repetitive reverse current	Tj=125°C, VRRM applied	—	—	1.0	mA
VFM	Forward voltage	Tj=25°C, IFM=30A, instantaneous meas.	—	—	1.2	V
Rth (j-c)	Thermal resistance	Junction to case	—	—	0.3	°C/W
Rth (c-f)	Contact thermal resistance	Case to fin, conductive grease applied	—	—	0.1	°C/W
—	Insulation resistance	Measured with a 500V megohmmeter between main terminal and case	10	—	—	MΩ

Feb.1999



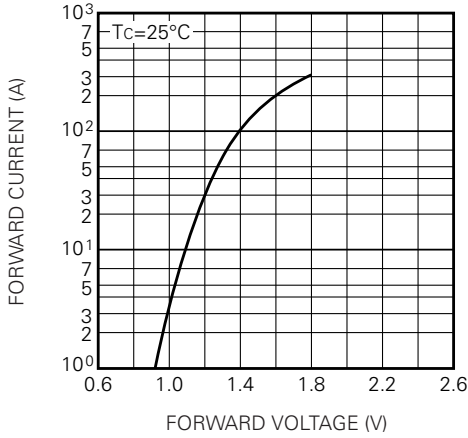
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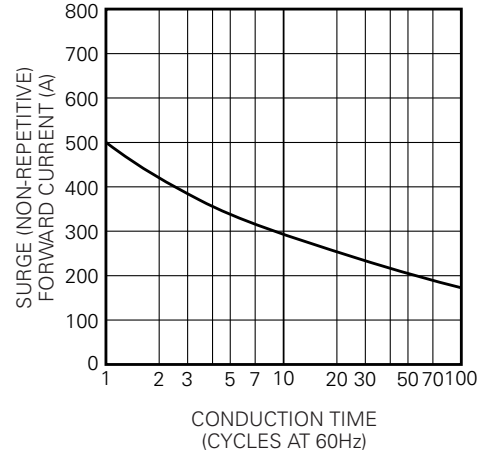
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INSULATED TYPE**

**PERFORMANCE CURVES**

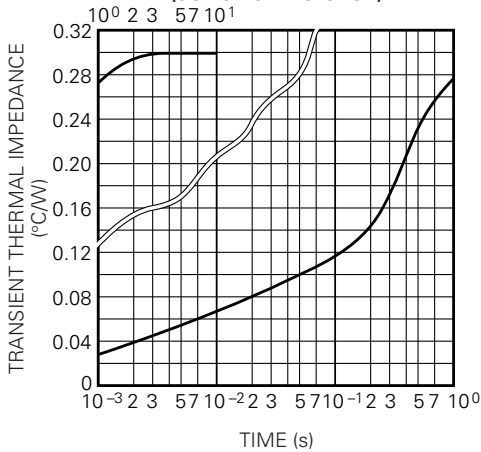
**MAXIMUM FORWARD CHARACTERISTIC**



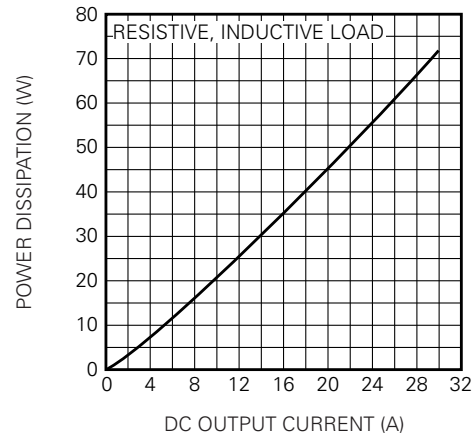
**ALLOWABLE SURGE (NON-REPETITIVE) FORWARD CURRENT**



**MAXIMUM TRANSIENT THERMAL IMPEDANCE (JUNCTION TO CASE)**



**MAXIMUM POWER DISSIPATION**



**ALLOWABLE CASE TEMPERATURE VS. DC OUTPUT CURRENT**

