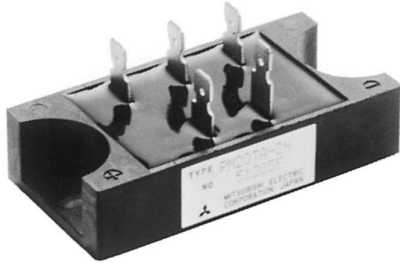


MITSUBISHI DIODE MODULES  
**RM 20TA-24,-2H**

HIGH VOLTAGE MEDIUM POWER GENERAL USE  
 INSULATED TYPE

RM20TA-24,-2H



- **I<sub>o</sub>** DC output current ..... **40A**
- **V<sub>RRM</sub>** Repetitive peak reverse voltage  
 .... **1200/1600V**

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

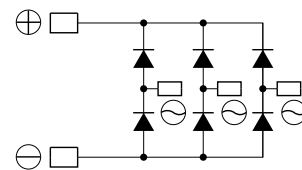
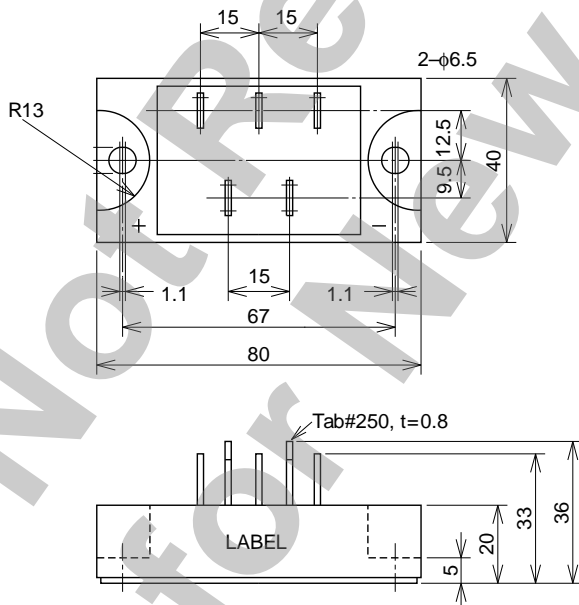
Yellow Card No. E80276 (N)  
 File No. E80271

**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



## RM20TA-24,-2H

HIGH VOLTAGE MEDIUM POWER GENERAL USE  
INSULATED TYPE

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Voltage class		Unit
		24	2H	
VRRM	Repetitive peak reverse voltage	1200	1600	V
VRSM	Non-repetitive peak reverse voltage	1350	1700	V
Ea	Recommended AC input voltage	440	480	V

Symbol	Parameter	Conditions	Ratings	Unit
Io	DC output current	Three-phase full wave rectifying circuit, Tc=100°C	40	A
IFSM	Surge (non-repetitive) forward current	One half cycle at 60Hz, peak value	400	A
I <sup>2</sup> <sub>t</sub>	I <sup>2</sup> <sub>t</sub> for fusing	Value for one cycle of surge current	6.7 × 10 <sup>2</sup>	A <sup>2</sup> s
f	Maximum operating frequency		1000	Hz
T <sub>j</sub>	Junction temperature		-40~+125	°C
T <sub>stg</sub>	Storage temperature		-40~+125	°C
V <sub>iso</sub>	Isolation voltage	Charged part to case	2500	V
—	Mounting torque	Mounting screw M6	1.96~2.94	N·m
—			20~30	kg·cm
—	Weight	Typical value	190	g

## ELECTRICAL CHARACTERISTICS

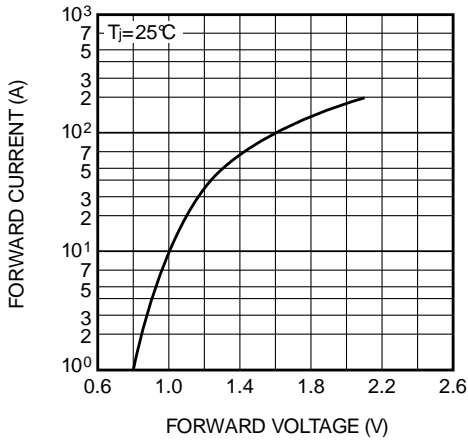
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I <sub>RRM</sub>	Repetitive reverse current	T <sub>j</sub> =125°C, V <sub>RRM</sub> applied	—	—	2.0	mA
V <sub>FM</sub>	Forward voltage	T <sub>j</sub> =25°C, I <sub>FM</sub> =40A, instantaneous meas.	—	—	1.25	V
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case	—	—	0.24	°C/W
R <sub>th(c-f)</sub>	Contact thermal resistance	Case to fin, conductive grease applied	—	—	0.06	°C/W
—	Insulation resistance	Measured with a 500V megohmmeter between main terminal and case	10	—	—	MΩ

# RM20TA-24,-2H

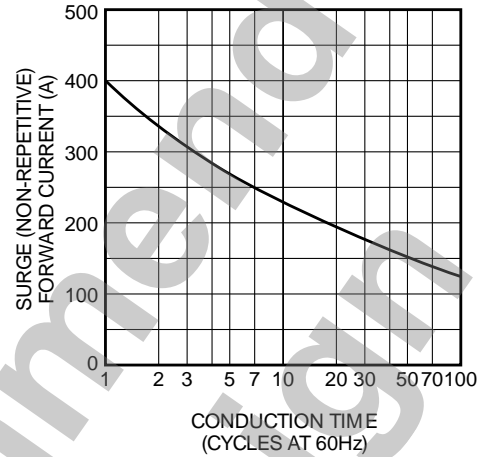
HIGH VOLTAGE MEDIUM POWER GENERAL USE  
INSULATED TYPE

## PERFORMANCE CURVES

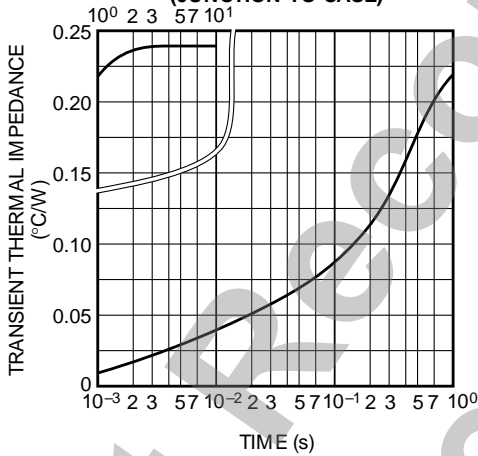
MAXIMUM FORWARD CHARACTERISTIC



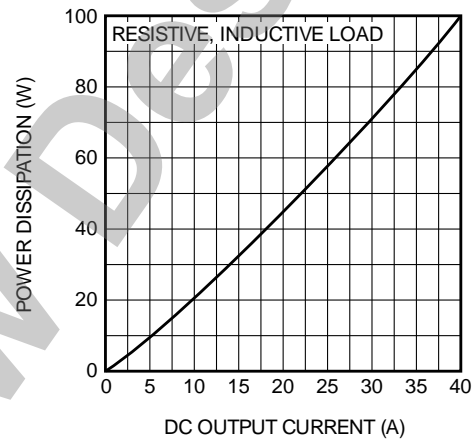
ALLOWABLE SURGE (NON-REPETITIVE) FORWARD CURRENT



MAXIMUM TRANSIENT THERMAL IMPEDANCE (JUNCTION TO CASE)



MAXIMUM POWER DISSIPATION



ALLOWABLE CASE TEMPERATURE VS. DC OUTPUT CURRENT

