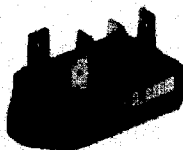


RM10TB-M,-H

MEDIUM POWER GENERAL USE
INSULATED TYPE

RM10TB-M,-H



- **Io** DC output current **20A**
- **VRRM** Repetitive peak reverse voltage
..... **400/800V**

• **3 phase bridge**

• **Insulated Type**

• **UL Recognized**

Yellow Card No. E80276 (N)

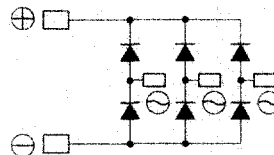
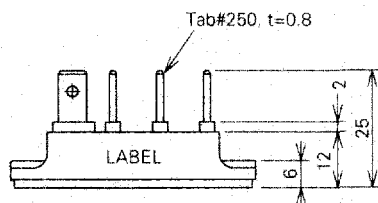
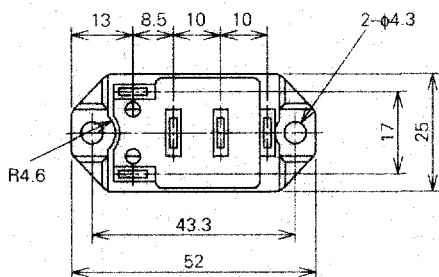
File No. E80271

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



RM10TB-M,-H

MEDIUM POWER GENERAL USE
INSULATED TYPE

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Voltage class		Unit
		M	H	
V _{RRM}	Repetitive peak reverse voltage	400	800	V
V _{RSM}	Non-repetitive peak reverse voltage	500	900	V
E _a	Recommended AC input voltage	110	220	V

Symbol	Parameter	Conditions	Ratings	Unit
I _O	DC output current	Three-phase full wave rectifying circuit, T _c =97°C	20	A
I _{FSM}	Surge (non-repetitive) forward current	One half cycle at 60Hz, peak value	350	A
I ² _t	I ² _t for fusing	Value for one cycle of surge current	4.0 × 10 ²	A ² s
f	Maximum operating frequency		1000	Hz
T _j	Junction temperature		-40~+150	°C
T _{stg}	Storage temperature		-40~+125	°C
V _{iso}	Isolation voltage	Main terminal to case	2000	V
—	Mounting torque	Mounting screw M4	0.98~1.47	N·m
—	Weight	Typical value	10~15	kg·cm
—	Weight	Typical value	30	g

ELECTRICAL CHARACTERISTICS

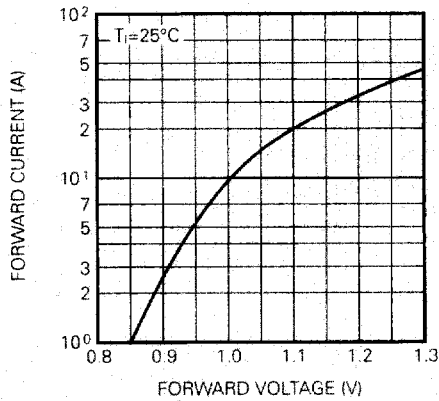
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I _{RRM}	Repetitive reverse current	T _j =150°C, V _{RRM} applied	—	—	1.5	mA
V _{FM}	Forward voltage	T _j =25°C, I _{FM} =20A, instantaneous meas.	—	—	1.1	V
R _{th(j-c)}	Thermal resistance	Junction to case	—	—	1.2	°C/W
R _{th(c-f)}	Contact thermal resistance	Case to fin, conductive grease applied	—	—	0.3	°C/W
—	Insulation resistance	Measured with a 500V megohmmeter between main terminal and case	10	—	—	MΩ

RM10TB-M,-H

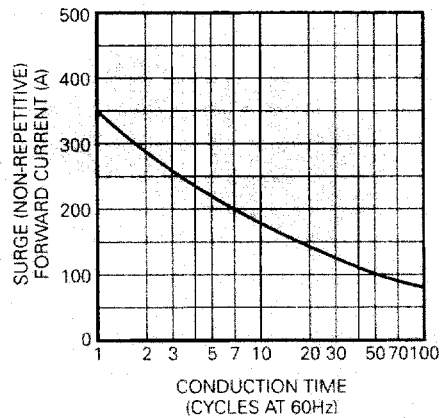
MEDIUM POWER GENERAL USE
INSULATED TYPE

PERFORMANCE CURVES

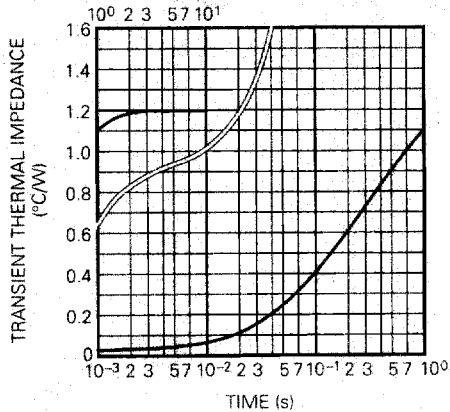
MAXIMUM FORWARD CHARACTERISTIC



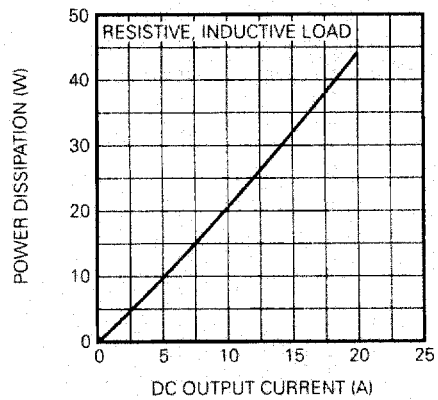
ALLOWABLE SURGE (NON-REPETITIVE)
FORWARD CURRENT



MAXIMUM TRANSIENT THERMAL IMPEDANCE
(JUNCTION TO CASE)



MAXIMUM POWER DISSIPATION



ALLOWABLE CASE TEMPERATURE
VS. DC OUTPUT CURRENT

