

RM400HV-34S

HIGH SPEED SWITCHING USE
INSULATED TYPE

RM400HV-34S



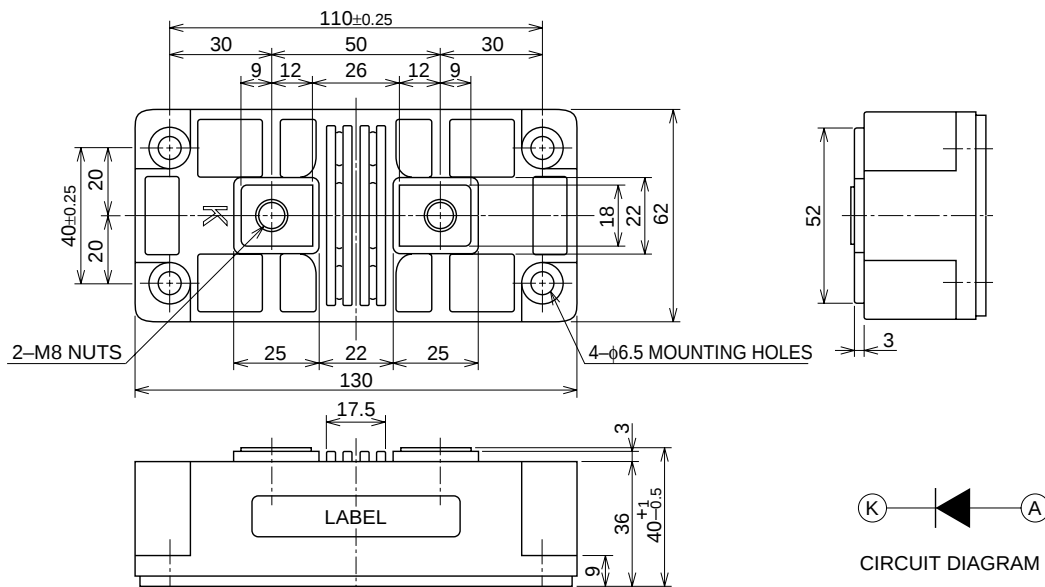
- **Idc** DC current **400A**
- **VRRM** Repetitive peak reverse voltage **1700V**
- **trr** Reverse recovery time **0.5μs**
- **Insulated Type**

APPLICATION

Free wheel use, Welders

OUTLINE DRAWING & CIRCUIT DIAGRAM

Dimensions in mm



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ABSOLUTE MAXIMUM RATINGS (T_j=25°C)

Symbol	Parameter	Voltage class	Unit
		34	
V _{RRM}	Repetitive peak reverse voltage	1700	V
V _{DRM}	Non-repetitive peak reverse voltage	1700	V
V _R (DC)	Reverse DC voltage	1360	V

Symbol	Parameter	Conditions	Ratings	Unit
I _{DC}	DC current	Resistive load, T _c =90°C	400	A
I _{FSM}	Surge (non-repetitive) forward current	One half cycle at 60Hz, peak value	8000	A
I ² _t	I ² _t for fusing	Value for one cycle surge current	2.6 × 10 ⁵	A ² s
T _j	Junction temperature		-40~+150	°C
T _{stg}	Storage temperature		-40~+125	°C
V _{iso}	Isolation voltage	Charged part to case	5750	V
—	Mounting torque	Main terminal screw M8	8.83~10.8	N·m
		Mounting screw M6	1.96~2.94	N·m
—	Weight	Typical value	740	g

ELECTRICAL CHARACTERISTICS

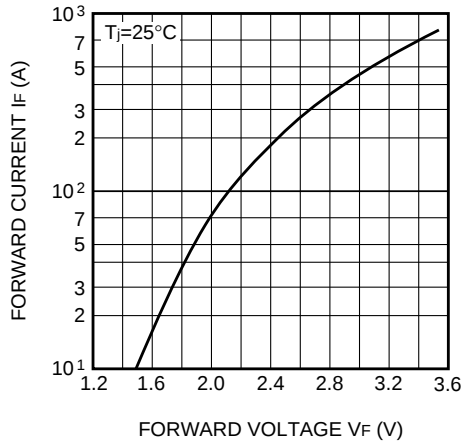
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I _{RRM}	Repetitive reverse current	T _j =150°C, V _{RRM} applied	—	—	50	mA
V _{FM}	Forward voltage	T _j =25°C, I _{FM} =400A, Instantaneous meas.	—	—	3.0	V
t _{rr}	Reverse recovery time	I _{FM} =400A, T _j =25°C. di/dt=-800A/μs, V _R =800V	—	—	0.5	μs
Q _{rr}	Reverse recovery charge		—	—	50	μC
R _{th} (j-c)	Thermal resistance	Junction to case	—	—	0.09	°C/W
R _{th} (c-f)	Contact thermal resistance	Case to fin, conductive grease applied	—	—	0.033	°C/W

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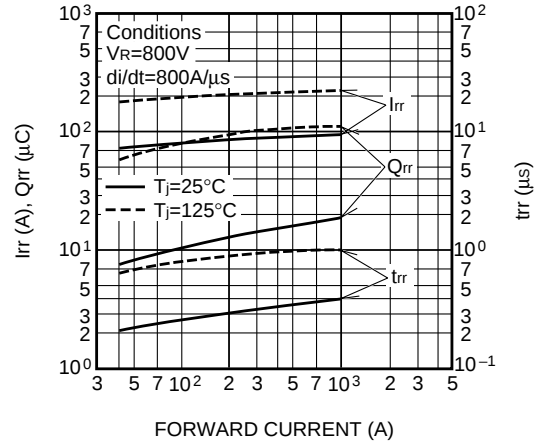
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PERFORMANCE CURVES

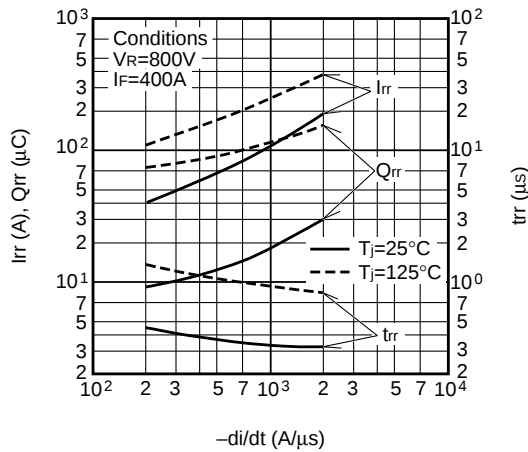
MAXIMUM FORWARD CHARACTERISTIC



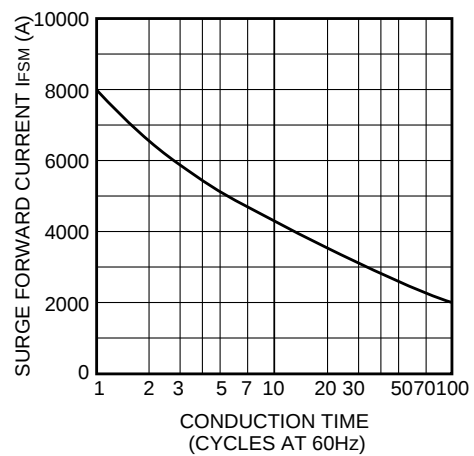
REVERSE RECOVERY CHARACTERISTICS
(FORWARD CURRENT DEPENDENCY)
(TYPICAL)



REVERSE RECOVERY CHARACTERISTICS
(di/dt DEPENDENCY)
(TYPICAL)



MAXIMUM SURGE CURRENT
(NON-REPETITIVE)



MAXIMUM TRANSIENT THERMAL IMPEDANCE

