

Diode Module (F.R.D)

FRS200CA120

UL; E76102

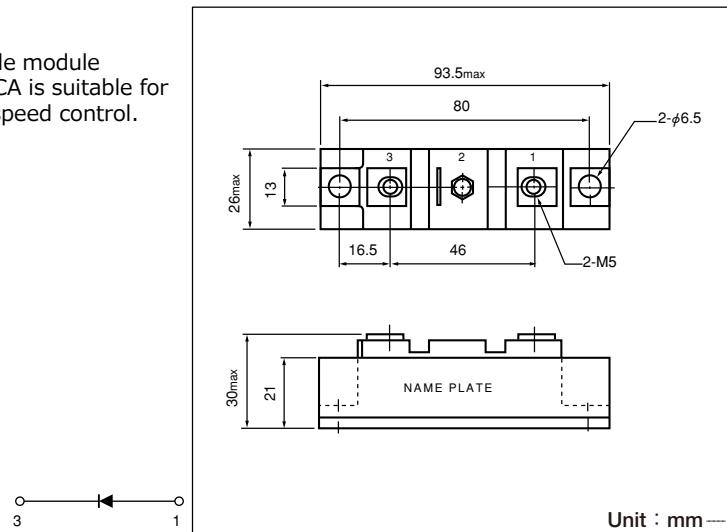
『Features』

FRS200CA is a high speed (fast recovery) isolated diode module designed for high power switching application. FRS200CA is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 350\text{ns}$
- I_F (AV) 200A
- Isolated Mounting base.
- High Surge Capability

『Applications』

- Inverter Welding Power Supply / Power Supply for Telecommunication / Various Switching Power Supply



Unit : mm ---

■ Maximum Ratings ($T_j=25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Unit	FRS200CA120	
Repetitive Peak Reverse Voltage	V_{RRM}	V	1200	
Reverse D.C. Voltage	$V_{R(DC)}$	V	960	

Item	Symbol	Unit	Ratings	Conditions
Forward Current	I_F	A	200	D.C. $T_c=78^\circ\text{C}$
Surge Forward Current	I_{FSM}	A	3300	1/2cycle, 60Hz, Peak value, non-repetitive
I^2t (for fusing)	I^2t	A^2s	45000	Value for one cycle of surge current
Junction Temperature	T_j	$^\circ\text{C}$	-40 to +150	
Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 to +125	
Isolation Voltage(R.M.S.)	V_{ISO}	V	2500	A.C. 1minute
Mounting torque	Mounting M6	N·m (kgf·cm)	4.7(48)	Recommended Value 2.5 to 3.9 (25 to 40)
	Terminal M5		2.7(28)	Recommended Value 1.5 to 2.5 (15 to 25)
Mass		g	170	Typical Value

■ Electrical Characteristics ($T_j=25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Repetitive Peak Reverse Current	I_{RRM}	mA			10.0	$V_R=V_{RRM}$, $T_j=150^\circ\text{C}$
Forward Voltage Drop	V_{FM}	V			1.8	$I_F=200\text{A}$, Inst. measurement
Reverse Recovery time	t_{rr}	ns			350	$I_F=200\text{A}$, $-\frac{di}{dt}=200\text{A}/\mu\text{s}$
Thermal Resistance(Junction to case)	R_{th}	$^\circ\text{C/W}$			0.2	

