

DIODE MODULE (F.R.D.)**FRS200AA40/60**

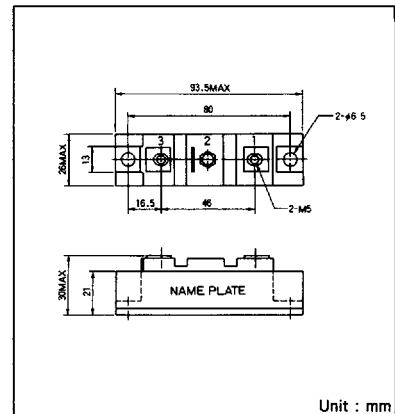
T-23-09

FRS200AA is a high speed isolated diode module designed for high power switching application. FRS200AA is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 200\text{ns}$
- $I_{F(AV)}$ 200A
- Isolated Mounting for each construction.
- High Surge Capability

(Applications)

Inverter Welding Power Supply
Power Supply for Telecommunication
Various Switching Power Supply.



Unit : mm

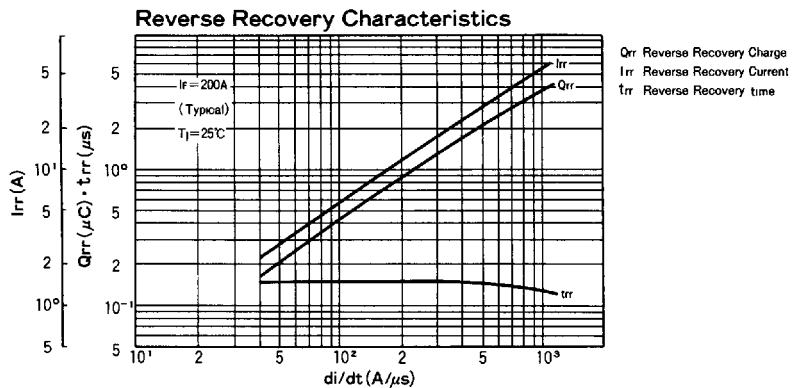
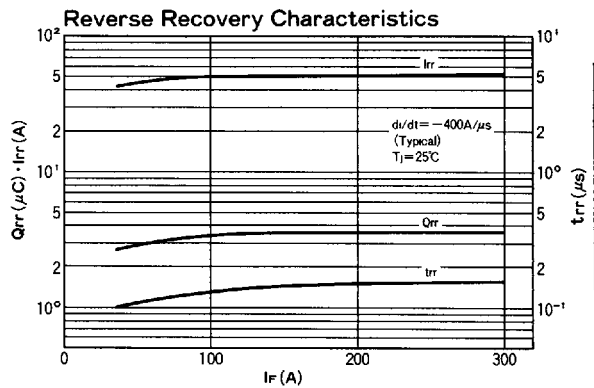
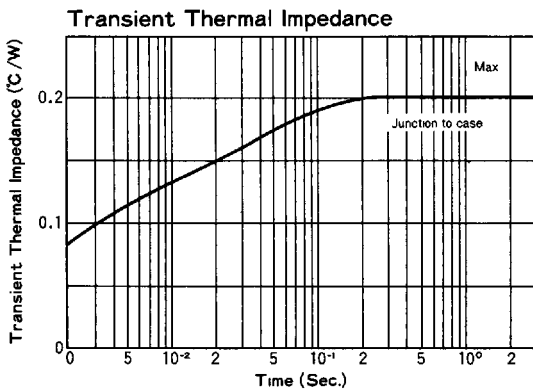
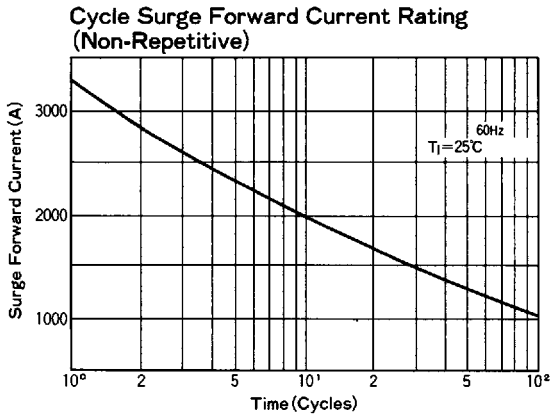
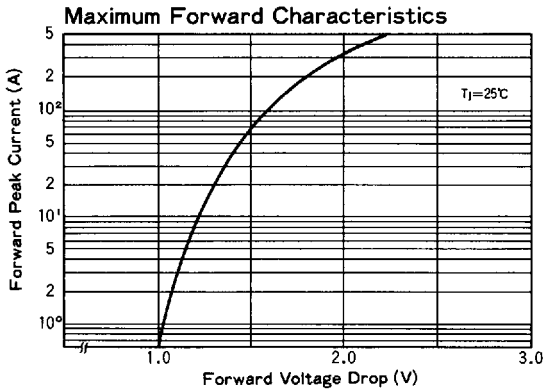
 $T_j = 25^\circ\text{C}$ **Maximum Ratings**

Symbol	Item	FRS200AA40	FRS200AA60	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	400	600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	480	720	V

Symbol	Item	Conditions	Ratings	Unit	
$I_{F(AV)}$	Average Forward Current	D.C. $T_c : 78^\circ\text{C}$	200	A	
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 50/60Hz, peak value, non-repetitive	3000/3300	A	
I^2t	I^2t		45000	A^2S	
T_j	Operating Junction Temperature		$-40 \sim +150$	$^\circ\text{C}$	
T_{stg}	Storage Temperature		$-40 \sim +125$	$^\circ\text{C}$	
V_{ISO}	Isolation Breakdown Voltage (R. M. S.)	A.C. 1minute	2500	V	
	Mounting Torque	(M6)	Recommended Value 43kgf·cm	38~48	kgf·cm
		Terminal (M5)	Recommended Value 25kgf·cm	22~28	
	Mass		170	g	

Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	at V_{DRM} , single phase, half wave, $T_j = 150^\circ\text{C}$	300	mA
V_{FM}	Forward Voltage Drop, max.	Forward current 200A, Inst. measurement	1.8	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.2	$^\circ\text{C/W}$
t_{rr}	Reverse Recovery Time, Max	$I_F = 200\text{A}$, $di/dt = -200\text{A}/\mu\text{s}$	200	ns



DIODE