DIODE MODULE (F.R.D.)

FRS200BA50/60

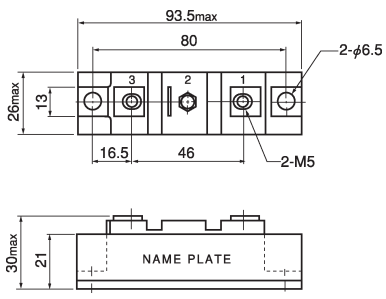
UL;E76102 (M)

FRS200BA is a high speed isolated diode module designed for high power switching application. **FRS200BA** is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leqq 100$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

(Tj=25℃)

Symbol	Item	Ratings	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	600	V
$V_{R(DC)}$	D.C. Reverse Voltage	480	V

Symbol	Item		Conditions	Ratings	Unit
I_F	Forward Current		D.C. Tc : 94℃	200	A
I_{FSM}	Surge Forward Current		1/2 cycle, 60Hz, peak value, non-repetitive	3300	A
I^2t	I^2t		Value for One cycle of surge curent	45000	A^2S
Tj	Operating Junction Temperature			−40～+150	℃
Tstg	Storage Temperature			−40～+125	℃
V_{ISO}	Isolation Breakdown Voltage (R.M.S.)		A.C. 1 minute	2500	V
	Mounting Torque	Mounting (M6)	Recommended Value 2.5～3.9 (25～40)	4.7 (48)	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5～2.5 (15～25)	2.7 (28)	
	Mass		Typical Value	170	g

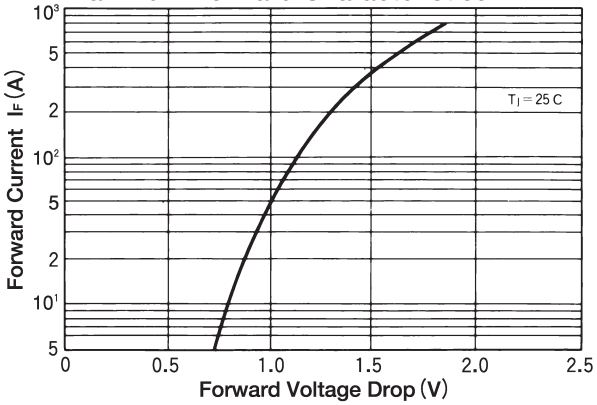
■Electrical Characteristics

(Tj=25℃)

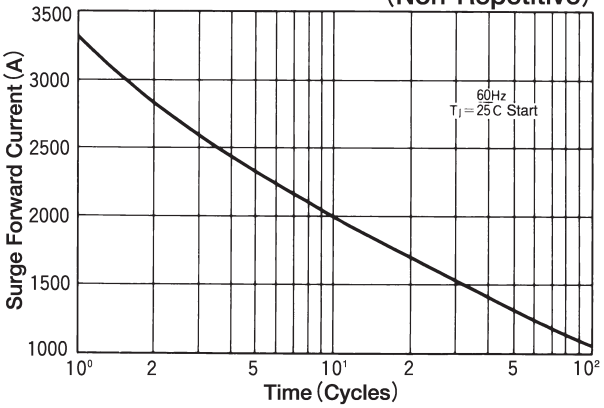
Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current,max	at VRRM, single phase, half wave.Tj=150℃	200	mA
V_{FM}	Forward Voltage Drop,max	Foward current 200A, Inst. measurement	1.3	V
Rth (j-c)	Thermal Impedance,max	Junction to case	0.2	℃/W
trr	Reverse Recovery Time, max	I_F=200A, di/dt=−200A/μs	100	ns

SanRex

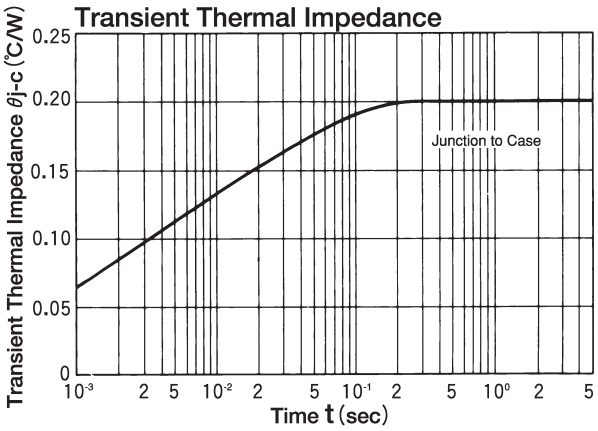
Maximum Forward Characteristics



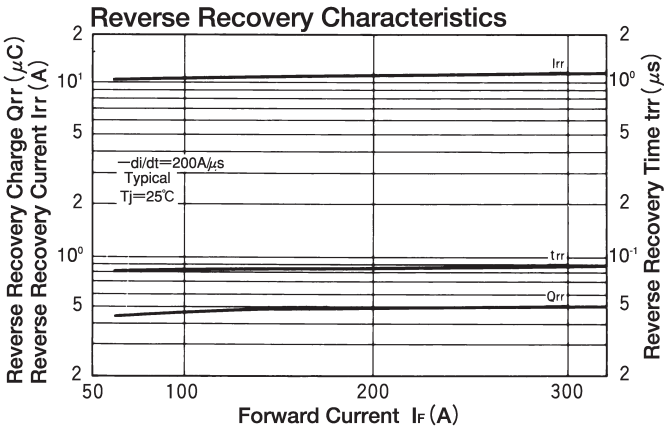
Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance



Reverse Recovery Characteristics



Reverse Recovery Characteristics —di/dt