

FRS400BA60

UL; E76102

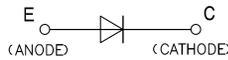
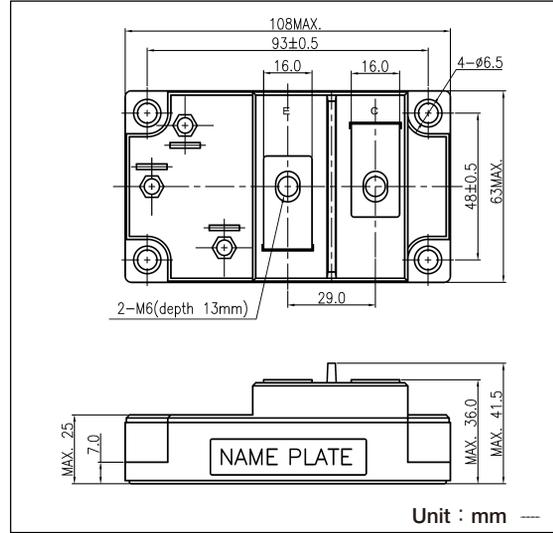
《Features》

FRS400BA is a high speed (fast recovery) isolated diode module designed for high power switching application. FRS400BA is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 200\text{ns}$
- I_F (AV) 400A
- 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°C unless otherwise specified)

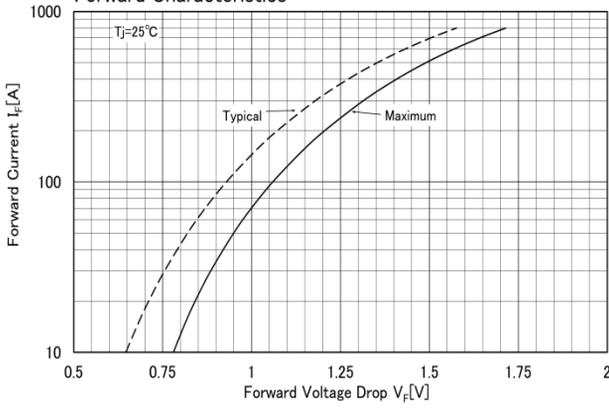
Item	Symbol	Unit	FRS400BA60
Repetitive Peak Reverse Voltage	V _{RRM}	V	600
Reverse D.C. Voltage	V _{R(DC)}	V	480

Item	Symbol	Unit	Ratings	Conditions
Forward Current	I _F	A	400	D.C. T _c =94°C
Surge Forward Current	I _{FSM}	A	4000	1/2cycle, 60Hz, Peak value, non-repetitive
I ² t(for fusing)	I ² t	A ² s	66640	Value for one cycle of surge current
Junction Temperature	T _j	°C	-40 to +150	
Storage Temperature	T _{stg}	°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 M6		4.7(48)	Recommended Value 2.5 to 3.9 (25 to 40)
Mass		g	460	Typical Value

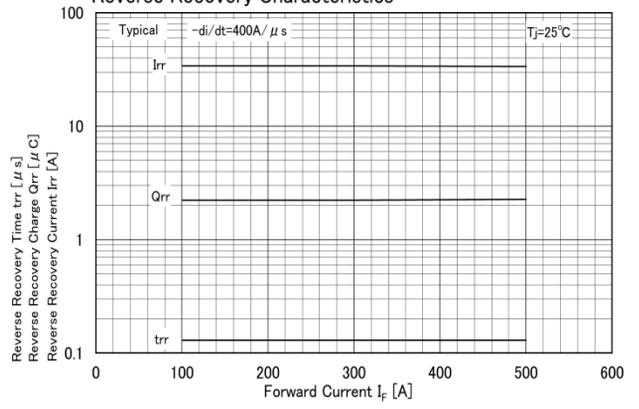
■ Electrical Characteristics (T_j=25°C unless otherwise specified)

Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Repetitive Peak Reverse Current	I _{RRM}	mA			400	V _R =V _{RRM} , T _j =125°C
Forward Voltage Drop	V _{FM}	V		1.30	1.40	I _F =400A, Inst. measurement
Reverse Recovery time	t _{rr}	ns		130	200	I _F =400A, -di/dt=400A/μs
Thermal Resistance(Junction to case)	R _{th}	°C/W			0.1	Per Module

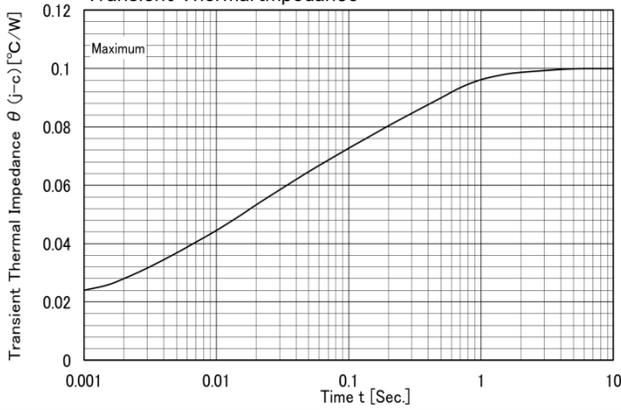
Forward Characteristics



Reverse Recovery Characteristics



Transient Thermal Impedance



Reverse Recovery Characteristics

