DIODE MODULE (F.R.D.)

FRS300BA50







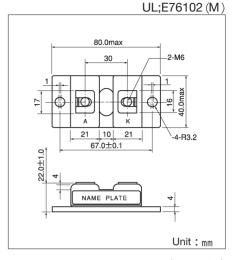
FRS300BA is a high speed isolated diode module designed for high power switching application. FRS300BA is suitable for high frequency application requiring low loss and high speed control.

- High Speed trr≤200ns
- IF(AV) 300A
- Isolated Mounting base.
- High Surge Capability

(Applications)

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





Maximum Ratings

(Tj=25°C)

Symbol	Item	Ratings	
		FRS300BA50	Unit
VRRM	Repetitive Peak Reverse Voltage	500	V
VR (DC)	D.C. Reverse Voltage	400	V

Symbol	l1	tem	Conditions	Ratings	Unit
lF	Forward Curr	ent	D.C. Tc: 85℃	300	Α
IFSM	Surge Forwar	d Current	½ cycle, 60Hz, peak value, non-repetitive	4000	Α
l²t	l²t		Value for one cycle of surge current	66600	A ² S
Tj	Operating June	ction Temperature		− 40∼ + 150	°C
Tstg	Storage Temp	oerature		−40∼+125	℃
Viso	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
		Terminal (M6)	Recommended Value 2.5~3.9 (25~40)	4.7 (48)	(kgf·cm)
	Mass		Typical Value	170	g

■Electrical Characteristics

Symbol	Item	Conditions	Ratings			Llmit				
			Min.	Тур.	Max.	Unit				
IRRM	Repetitive Peak Reverse Current	Tj=125℃, VRRM=500V			300	mA				
VFM	Forward Voltage Drop	Tj=25°С, Iғм=300A, Inst, measurement			1.3	V				
trr	Reverse Recovery Time	IF=300A, $-di/dt=300A/\mu s$			200	ns				
Rth (j-c)	Thermal Impedance	Junction to case			0.165	°C/W				

FRS300BA50







