

DIODE MODULE (F.R.D.)

FRG25BA60

TOP



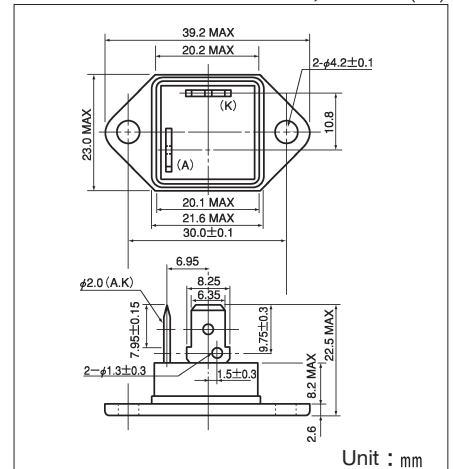
UL;E76102 (M)

FRG25BA60 is a high speed isolated diode module designed for high power switching application. FRG25BA60 is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 100\text{ns}$
- $I_{F(AV)}$ 25A
- Isolated Mounting base.
- High Surge Capability

(Applications)

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



Maximum Ratings

(T_j=25°C)

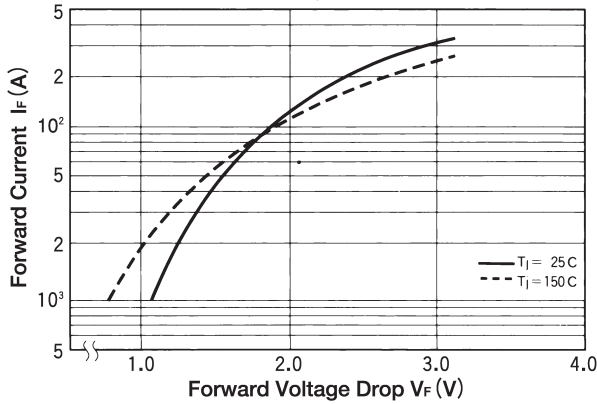
Symbol	Item	Ratings	Unit
		FRG25BA60	
V _{RRM}	Repetitive Peak Reverse Voltage	600	V
V _{R(DC)}	D.C. Reverse Voltage	480	V

Symbol	Item	Conditions	Ratings	Unit
I _F	Forward Current	D.C. T _c =94°C	25	A
I _{FSM}	Surge Forward Current	1/2 cycle, 60Hz, peak value, non-repetitive	450	A
I ² t	I ² t	Value for One cycle of surge current	840	A ² S
T _j	Operating Junction Temperature		-40~+150	°C
T _{stg}	Storage Temperature		-40~+125	°C
V _{ISO}	Isolation Breakdown Voltage (R.M.S.)	A.C. 1 minute	2500	V
	Mounting Torque (Mounting M4)	Recommended Value 1.0~1.4 (10~14)	1.5 (15)	Nm (kgf·cm)
	Mass	Typical Value	23	g

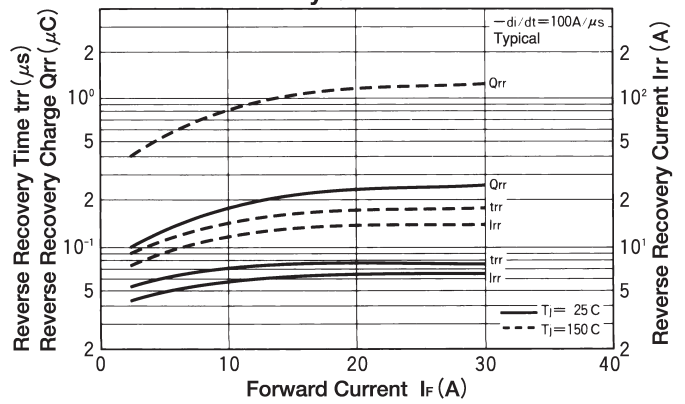
Electrical Characteristics

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I _{RRM}	Repetitive Peak Reverse Current	T _j =150°C, at V _{RRM} =600V		25	30	mA
V _{FM}	Forward Voltage Drop	T _j =25°C, I _F =25A, Inst. measurement		1.20	1.30	V
t _{rr}	Reverse Recovery Time	I _F =25A, di/dt=100A/μs		80	100	ns
R _{th(j-c)}	Thermal Impedance	Junction to case			1.6	°C/W

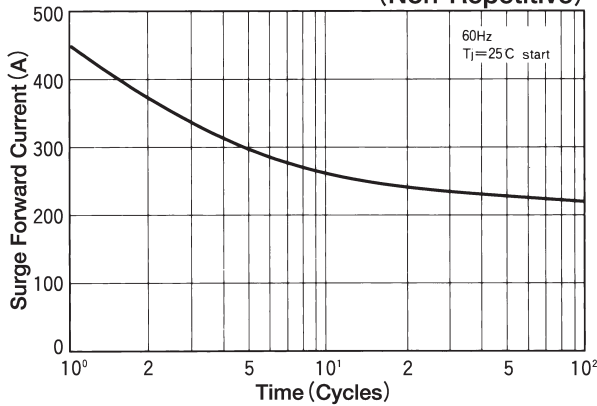
Maximum Forward Characteristics



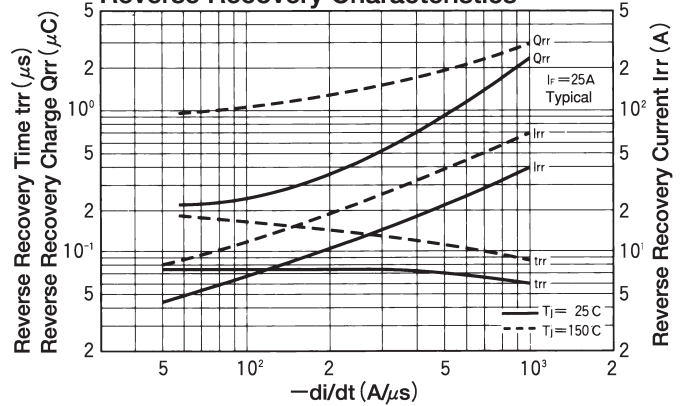
Reverse Recovery Characteristics



Cycle Surge Forward Current Rating (Non-Repetitive)



Reverse Recovery Characteristics



Transient Thermal Impedance

