

DIODE MODULE (F.R.D.)

FRG25CA120



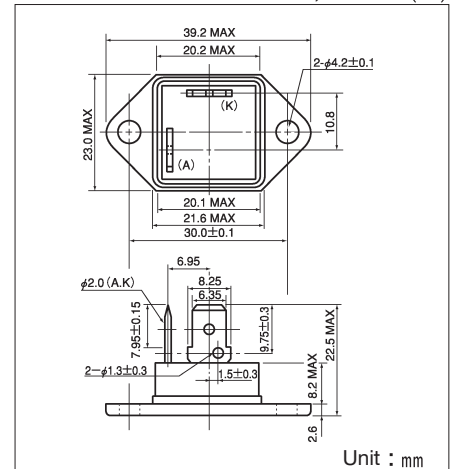
UL;E76102 (M)

FRG25CA120 is a high speed isolated diode module designed for high power switching application. FRG25CA120 is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 200\text{ns}$
- $I_{F(AV)}$ 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
		FRG25CA120	
V _{RRM}	Repetitive Peak Reverse Voltage	1200	V
V _{R(DC)}	D.C. Reverse Voltage	960	V

Symbol	Item	Conditions	Ratings	Unit
I _F	Forward Current	D.C. T _c :78°C	25	A
I _{FSM}	Surge Forward Current	1/2 cycle, 60Hz, peak value, non-repetitive	400	A
I ² t	I ² t	Value for one cycle surge current	660	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)	N·m (kgf·cm)
	Mass	Typical Value	23	g

Electrical Characteristics

(T_j=25°C)

Symbol	Item	Conditions	Ratings	Unit
I _{RRM}	Repetitive Peak Reverse Current,max	T _j =125°C at V _{RRM} =1200V	1	mA
V _{FM}	Forward Voltage Drop,max	T _j =25°C I _F =25A, Inst. measurement	1.80	V
t _{rr}	Reverse Recovery Time,max	I _F =25A, -di/dt=100A/μs	200	ns
R _{th(j-c)}	Thermal Impedance,max	Junction to case	1.6	°C/W

