

DIODE MODULE (F.R.D.)**FRG25AA40/60**

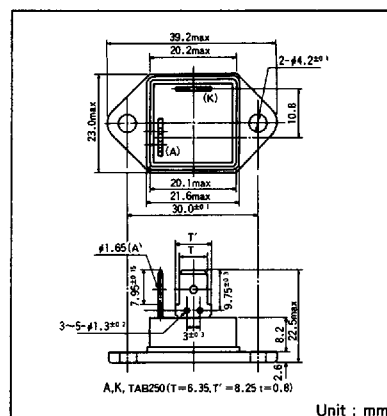
T-23-09

FRG25AA is a medium power isolated mould diode suitable for high frequency application.

- High Speed $t_{rr} \leq 200\text{ns}$
- $I_{F(AV)} = 25\text{A}$
- Isolated Mould devices with $V_{ISO} = 2500\text{V}$
- Tab terminals for easy wiring
- High surge capability

(Applications)

Switching power supply
Transistor Snubber circuit
Ultrasonic Application etc.

A $\rightarrow$ K

Unit : mm

 $T_j = 25^\circ\text{C}$ **Maximum Ratings**

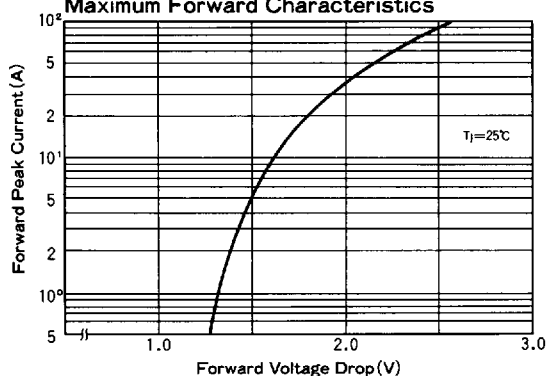
Symbol	Item	FRG25AA40	FRG25AA60	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	400	600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	480	720	V

Symbol	Item	Conditions	Ratings	Unit
$I_{F(AV)}$	Average Forward Current	D.C. $T_c : 78^\circ\text{C}$	25	A
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 50/60Hz, peak value, non-repetitive	410/450	A
I^2t	I^2t		840	A^2s
T_j	Operating Junction Temperature		$-40 \sim +150$	$^\circ\text{C}$
T_{stg}	Storage Temperature		$-40 \sim +125$	$^\circ\text{C}$
V_{ISO}	Isolation Breakdown Voltage (R. M. S.)	A.C. 1minute	2500	V
	Mounting Torque (M4)	Recommended Value 12.5kgf·cm	11~14	kgf·cm
	Mass	Including nut & washer and wrapping material	23	g

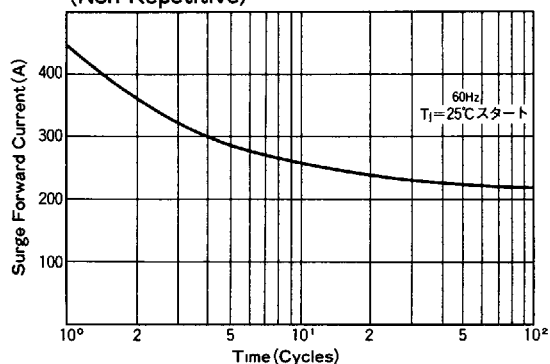
Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	at V_{DRM} , single phase, half wave, $T_j = 150^\circ\text{C}$	30	mA
V_{FM}	Forward Voltage Drop, max.	Foward current 25A, Inst. measurement	1.8	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	1.6	$^\circ\text{C/W}$
t_{rr}	Reverse Recovery Time, Max	$I_F = 25\text{A}$, $di/dt = -100\text{A}/\mu\text{s}$	200	ns

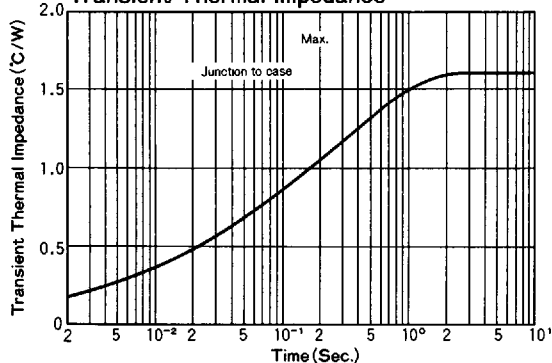
Maximum Forward Characteristics



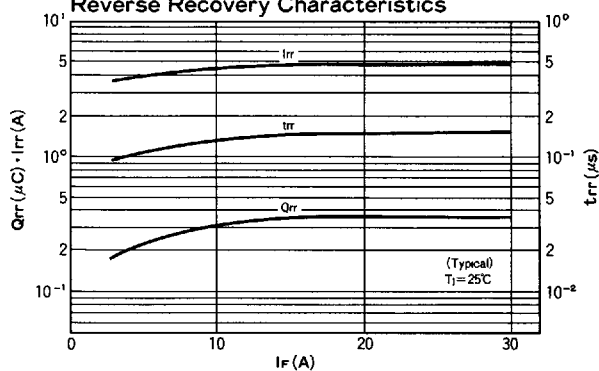
Cycle Surge Forward Current Rating (Non-Repetitive)



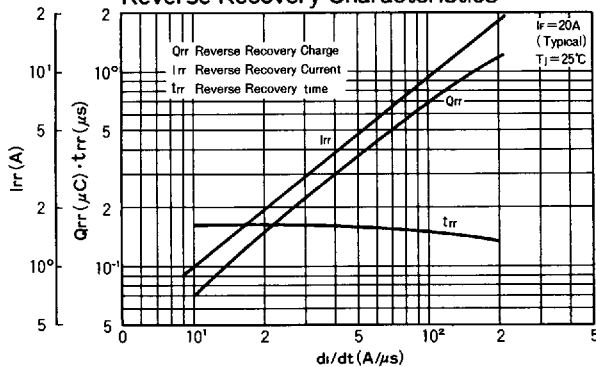
Transient Thermal Impedance



Reverse Recovery Characteristics



Reverse Recovery Characteristics



DIODE