

DIODE MODULE (F.R.D.)

FRD/FDS100BA60

TOP



UL:E76102 (M)

FRD (FDS)100BA is a high speed dual diode module designed for high power switching application. **FRD (FDS)100BA** is suitable for high frequency application requiring low loss and high speed control.

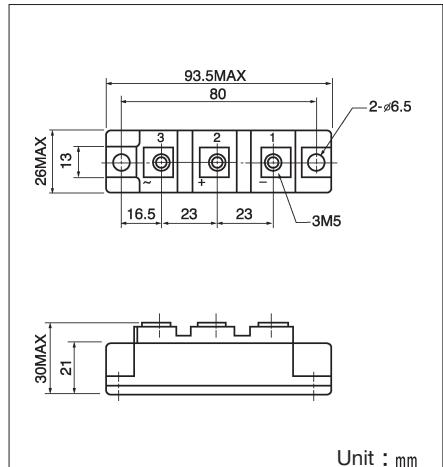
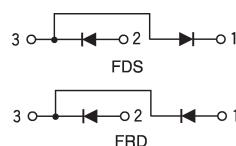
- High Speed $t_{rr} \leq 100\text{ns}$
- $I_F(\text{AV})$ 100A (each device)
- Isolated mounting construction.
- High Surge Capability

(Applications)

Switching Power Supply, Inverter Welding Power

Supply

Power Supply for Telecommunication



Unit : mm

■ Maximum Ratings

Symbol	Item	Ratings	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	600	V
$V_R(\text{DC})$	D.C. Reverse Voltage	480	V

Symbol	Item	Conditions	Ratings	Unit
I_F	Forward Current	D.C. $T_c : 94^\circ\text{C}$	100	A
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 60Hz, peak value, non-repetitive	2000	A
I^2t	I^2t	Value for One cycle of surge current	16700	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. 1 minute	2500	V
I_F	Mounting Torque	Mounting (M6)	Recommended Value 2.5~3.9 (25~40)	4.7 (48) Nm
		Terminal (M5)	Recommended Value 1.5~2.5 (15~25)	2.7 (28) (kgf·cm)
	Mass		170	g

■ Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	$V_R = V_{RRM}$, $T_j = 125^\circ\text{C}$	100	mA
V_{FM}	Forward Voltage Drop, max.	Forward current 100A, Inst. measurement	1.3	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.4	$^\circ\text{C}/\text{W}$
t_{rr}	Reverse Recovery Time, max.	$I_F = 100\text{A}$, $di/dt = -100\text{A}/\mu\text{s}$	100	ns

