

DIODE MODULE (F.R.D.)

FRD/FDS100BA60

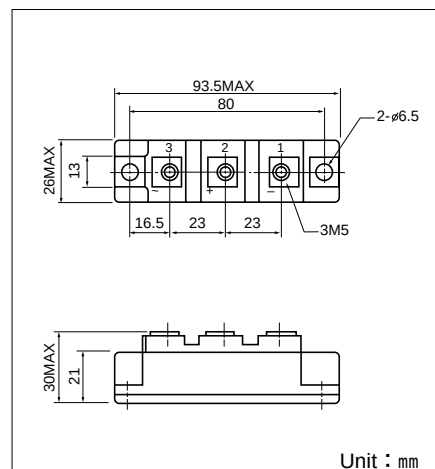
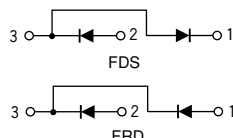
UL:E76102 (M)

FRD (FDS)100BA is a high speed (fast recovery) 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 $t_{rr} \leq 100\text{ns}$
- $I_{F(AV)}$ 100A (each device)
- Isolated mounting construction.
- High Surge Capability

(Applications)

Switching Power Supply, Inverter Welding Power Supply
Power Supply for Telecommunication



Maximum Ratings

($T_j = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Item	Ratings	Unit
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℃	100	A
I _{FSM}	Surge Forward Current		½ cycle, 60Hz, peak value, non-repetitive	2000	A
I ² t	I ² t		Value for One cycle of surge curent	16700	A²S
T _j	Operating Junction Temperature			−40 to +150	℃
T _{stg}	Storage Temperature			−40 to +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)	Nm (kgf•cm)
		Terminal (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (28)	
	Mass			170	g

Electrical Characteristics

Symbol	Item	Conditions	Ratings		Unit
			Typ.	Max.	
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	1.15	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.	$I_F = 100\text{A}$, $di/dt = -100\text{A}/\mu\text{s}$	85	100	ns

