DIODE MODULE (F.R.D.)
FRD100CA100/120

FRD100CA is a high speed (fast recovery) dual diode module designed for high power switching application. **FRD100CA** is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 300ns$
- $I_{F(AV)}$ 100A (each device)
- Isolated mounting construction.
- High Surge Capability

　(Applications)

　Switching Power Supply. Inverter Welding Power Supply

　Power Supply for Telecommunication
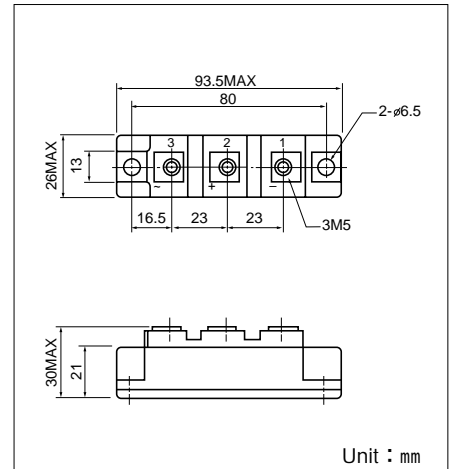
Unit：mm

■Maximum Ratings

(Tj＝25℃ unless otherwise specified)

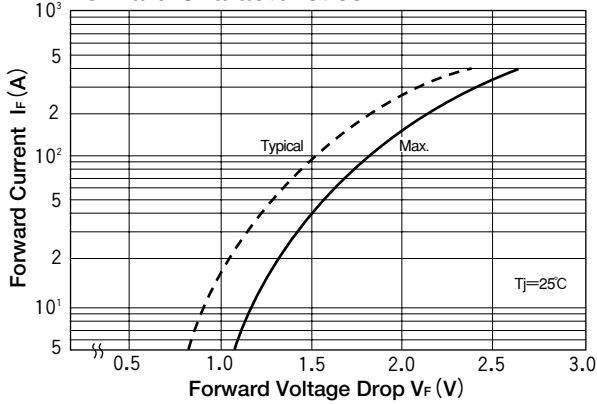| Symbol	Item	Ratings		Unit
		FRD100CA100	FRD100CA120	
V_{RRM}	Repetitive Peak Reverse Voltage	1000	1200	V
$V_{R(DC)}$	D.C. Reverse Voltage	800	960	V

Symbol	Item		Conditions	Ratings	Unit
I_F	Forward Current		D.C. Tc＝78℃	100	A
I_{FSM}	Surge Forward Current		½ cycle, 60Hz, peak value, non-repetitive	2000	A
I^2t	I^2t		Value for one cycle of surge current	16600	A^2S
Tj	Operating Junction Temperature			−40 to ＋150	℃
Tstg	Storage Temperature			−40 to ＋125	℃
V_{ISO}	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)	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (28)	
	Mass		Typical Value	170	g

■Electrical Characteristics

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I_{RRM}	Repetitive Peak Reverse Current	$V_R=V_{RRM}$, $T_j=150℃$			5.0	mA
V_{FM}	Forward Voltage Drop	$I_F=100A$, Inst. measurement			1.8	V
t_{rr}	Reverse Recovery Time	$I_F=100A$, $-di/dt=100A/\mu s$			300	ns
$R_{th}(j-c)$	Thermal Impedance	Junction to case			0.4	℃/W

Forward Characteristics

Forward Current I_F (A)

Forward Voltage Drop V_F (V)

Typical Max.

$T_j=25°C$

Reverse Recovery Characteristics

Reverse Recovery Time trr (μs)
Reverse Recovery Current Irr (A)
Reverse Recovery Charge Qrr (μC)

Forward Current I_F (A)

Irr
Irr
Qrr
Qrr
trr
trr

Typical
$-di/dt=100A\mu s$
$T_j=25°C$
$T_j=150°C$

Transient Thermal Impedance

Transient Thermal Impedance θj-c (°C/W)

Time t (sec)

Max.
Junction to case
Per one element

Reverse Recovery Characteristics

Reverse Recovery Time trr (μs)
Reverse Recovery Current Irr (A)
Reverse Recovery Charge Qrr (μC)

$-di/dt$ (A/μs)

Irr
Qrr
Irr
trr
trr
Qrr

Typical
IF=100A
$T_j=25°C$
$T_j=150°C$
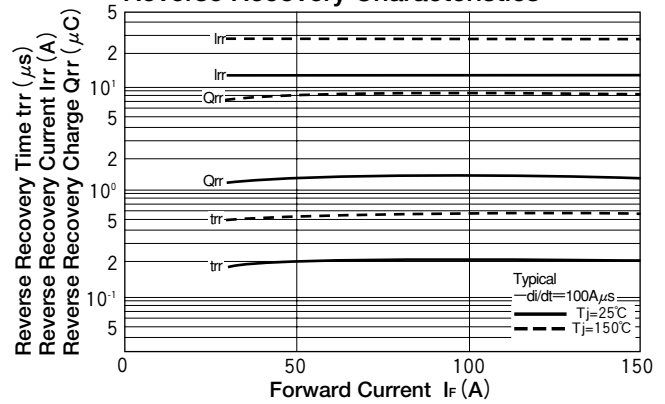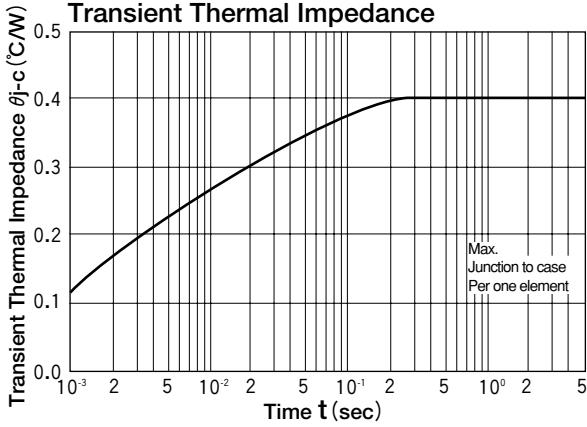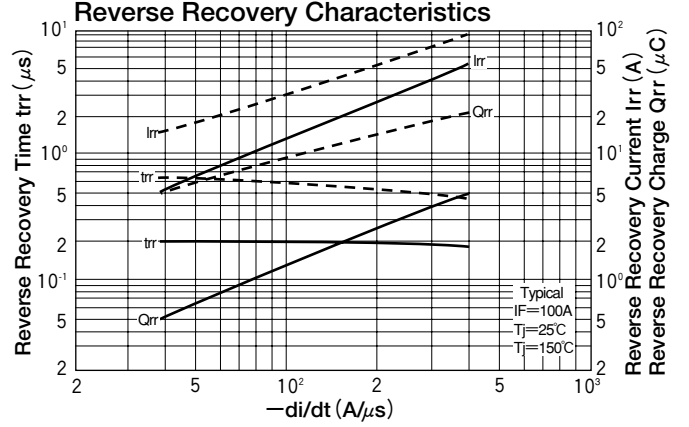
X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Discrete Semiconductor Modules *category:*

Click to view products by Sanrex *manufacturer:*

Other Similar products are found below :

07.471.1280.0 25.161.3453.0 25.163.0653.1 25.163.2453.0 25.163.4253.0 25.179.2253.0 25.190.2053.0 25.194.3253.0 25.194.3453.0 25.320.2053.1 25.320.4853.1 25.320.5253.1 25.325.1253.1 25.326.3253.1 25.326.3553.1 25.326.4253.1 25.330.0953.1 25.330.1653.1 25.330.3953.1 25.330.4753.1 25.330.5253.1 25.332.4353.1 25.334.3253.1 25.334.3353.1 25.350.1653.0 25.350.2053.0 25.350.2453.0 25.352.1453.0 25.352.1653.0 25.352.2453.0 25.352.4753.1 25.352.5453.1 25.522.3253.0 25.522.3353.0 25.602.4053.0 25.640.5053.0 APT10025JVFR APT10M07JVFR APT12040JVR APT19F100J APT20M11JFLL APT2X100DQ60J APT2X151DL60J APT2X21DC60J APT2X30D60J APT2X60DQ120J APT30F60J APT30M40JVFR APT32F120J APT33N90JCU2