

F12-XX00
FAST RECOVERY
DIODE

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _J (°C)	VALUE			UNIT
				Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled, T _{hs} =55°C	150			1715	A
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled, T _{hs} =90°C	150			1234	A
V _{RRM}	Repetitive peak reverse voltage	V _{RRM} tp=10ms V _{RSM} = V _{DRM} &V _{RRM} +100V	150	1100		2000	V
I _{RRM}	Repetitive peak current	at V _{RRM}	150			80	mA
I _{FSM}	Surge forward current	10ms half sine wave	150			15	KA
I ² T	I ² T for fusing coordination	V _R =0.6V _{RRM}				1100	A ² s*10 ³
V _{FO}	Threshold voltage		150			1.42	V
r _F	Forward slop resistance					0.26	mΩ
V _{FM}	Peak on-state voltage	I _{TM} =3000A, F=24KN	150			2.20	V
I _m	Reverse recovery current	I _{TM} =1000A, tp=1000μs, -di/dt=40A/μs, V _R =50V	150			130	A
t _{rr}	Reverse recovery time					3.5	μs
Q _{rr}	Recovery charge					228	250
R _{th(j-h)}	Thermal resistance Junction to heatsink	At 180° sine double side cooled Clamping force 24KN				0.022	°C /W
F _m	Mounting force			19		26	KN
T _{stg}	Stored temperature			-40		160	°C
W _t	Weight					470	g
Outline	ZT50cT						

Outline

