

F10-XX00  
FAST RECOVERY  
DIODE

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled, T <sub>hs</sub> =55°C	150			1303	A
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled, T <sub>hs</sub> =90°C	150			926	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>DRM</sub> &V <sub>RRM</sub> +100V	150	1100		2000	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			50	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	150			13	KA
I <sup>2</sup> T	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				850	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			1.50	V
r <sub>F</sub>	Forward slop resistance					0.29	mΩ
V <sub>FM</sub>	Peak on-state voltage	I <sub>TM</sub> =3000A, F=18KN	150			2.37	V
I <sub>m</sub>	Reverse recovery current	I <sub>TM</sub> =800A, tp=1000μs, -di/dt=40A/μs, V <sub>R</sub> =50V	150			90	A
t <sub>rr</sub>	Reverse recovery time					2.8	μs
Q <sub>rr</sub>	Recovery charge				126	150	μC
R <sub>th(j-h)</sub>	Thermal resistance Junction to heatsink	At 180° sine double side cooled Clamping force 18KN				0.030	°C /W
F <sub>m</sub>	Mounting force			15		20	KN
T <sub>stg</sub>	Stored temperature			-40		160	°C
W <sub>t</sub>	Weight					360	g
Outline	ZT39cT40						

Outline

