



GMF71020

FAST RECOVERY DIODE MODULE

VOLTAGE UP TO	0 V
AVERAGE CURRENT	200 A
SURGE CURRENT	5 kA

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
VRRM	Repetitive peak reverse voltage		400-800 V
VRSM	Non-repetitive peak reverse voltage		100 V
IRRM	Repetitive peak reverse current, max.	VRRM, single phase, half wave, T _j = T _{jmax}	40 mA

FORWARD CHARACTERISTICS

I _{F(AV)}	Average forward current	Sine wave, 180° conduction, T _c = 85°C	200 A
I _{F(RMS)}	R.M.S. forward current	Sine wave, 180° conduction, T _c = 85°C	375 A
I _{FSM}	Surge forward current	Non rep. half sine wave, 50 Hz, V _R = 0 V, T _j = 25 °C	5 kA
I ² t	I ² t for fusing coordination		125 kA ² s
V _{FM}	Peak forward voltage, max	Forward current I _F = 800 A, T _j = 25 °C	1.5 V

SWITCHING CHARACTERISTICS

Q _{rr}	Reverse recovery charge, typ	T _j = 25°C, I _F = 800 A, di/dt = -25 A/μs	100 μC
I _{rr}	Reverse recovery current	V _R = 30 V	130 A
t _{rr}	Reverse recovery time		1.5 μs

THERMAL AND MECHANICAL CHARACTERISTICS

R _{th(j-c)}	Thermal resistance (junction to case)		0.16 °C/W
R _{th(c-h)}	Thermal resistance (case to heatsink)		0.03 °C/W
T _{jmax}	Max operating junction temperature		150 °C
T _{stg}	Storage temperature		-40 / 150 °C
M	Mounting torque - Bus bar +/- 10%		10 N·m
M	Mounting torque - Heatsink +/- 10%		6 N·m
mass			100 g