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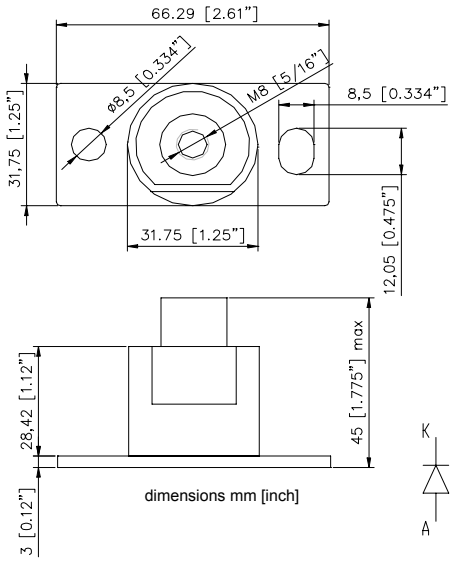

GMF71020

FAST RECOVERY DIODE MODULE

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

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
V_{RRM}	Repetitive peak reverse voltage		400-800 V
V_{RSM}	Non-repetitive peak reverse voltage		100 V
I_{RRM}	Repetitive peak reverse current, max.	V_{RRM}, single phase, half wave, Tj = Tjmax	40 mA

FORWARD CHARACTERISTICS

$I_{F(AV)}$	Average forward current	Sine wave,180° conduction, Tc = 85°C	200 A
$I_{F(RMS)}$	R.M.S. forward current	Sine wave,180° conduction, Tc = 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^2t	I² t for fusing coordination		125 kA²s
V_{FM}	Peak forward voltage, max	Forward current I_F = 800 A, Tj = 25 °C	1.5 V

SWITCHING CHARACTERISTICS

Q_{rr}	Rverse 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