



GMG316D09

THREE-PHASE RECTIFIER BRIDGE

Low thermal resistance
 Electrically insulated package
 High output current



VOLTAGE UP TO 1600 V
OUTPUT CURRENT UP TO 90 A

BLOCKING CHARACTERISTICS

Characteristic	Conditions	Value
V _R RRM	Repetitive peak reverse voltage	1600 V
V _R RSM	Repetitive peak off-state voltage	1700 V
I _R RRM	Repetitive peak reverse current, max.	V _R , single phase, half wave, T _J = T _J max
V _{INS}	RMS insulation voltage	Any terminal to base - 60 s

FORWARD CHARACTERISTICS

I _O (AV)	Average DC output current	T _c = 108 °C	90 A
I _F FSM	Surge current	Non rep. half sine wave, 50 Hz, V _R = 0 V, T _J = T _J max	930 A
I ² t	I ² t for fusing coordination		3.18 kA ² s
V _F (T _O)	Threshold voltage	T _J = 25°C	1.0 V
r _F	Forward slope resistance	T _J = 25°C	3.91 mΩ
V _{FM}	Forward voltage, max	Forward current I _F = 100 A, T _J = 25°C	1.36 V

THERMAL AND MECHANICAL CHARACTERISTICS

R _{th(j-c)}	Thermal resistance (junction to case)	Per bridge	0.17 °C/W
R _{th(c-h)}	Thermal resistance (case to heatsink)		0.12 °C/W
T _J max	Operating junction temperature		-40 / 150 °C
M1	Mounting torque +/- 15%	Module to heatsink (M5)	4.5 N·m
M2	Mounting torque +/- 15%	Busbar to terminal (M5)	3.0 N·m
	Mass		100 g

