

GMG3...D...

THREE-PHASE RECTIFIER BRIDGE

Low thermal resistance
Electrically insulated package
Versatile pin out
High output current

VOLTAGE UP TO 1600 V
OUTPUT CURRENT UP TO 100 A

BLOCKING CHARACTERISTICS

GMG3...D06... GMG1...D10...

Characteristic	Conditions	Value	Value
V_{RRM}	Repetitive peak reverse voltage	1200-1600V	1200-1600V
V_{RSM}	Repetitive peak off-state voltage	1700 V	1700 V
I_{RRM}	Repetitive peak reverse current, max.	V_R , single phase, half wave, $T_j = T_{jmax}$	2 mA
V_{INS}	RMS insulation voltage	Any terminal to base - 60 s	3000 V

FORWARD CHARACTERISTICS

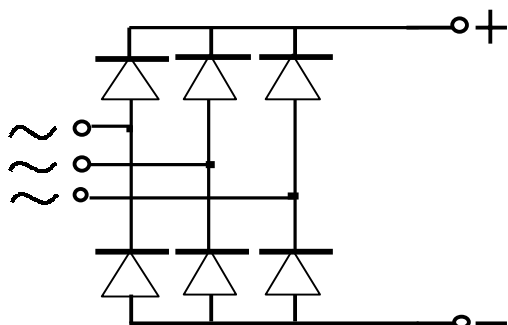
$I_{O(AV)}$	Average DC output current	$T_c = 80\text{ }^{\circ}\text{C}$ - Solder connection	60 A	100 A
I_{FSM}	Surge current	Non rep. half sine wave, 50 Hz,	360 A	540 A
I^2t	I^2t for fusing coordination	$V_R = 0\text{ V}$, $T_j = T_{jmax}$	0.65 kA ² s	1.46 kA ² s
$V_F(T_O)$	Threshold voltage	$T_j = T_{jmax}$	1.0 V	1.0 V
r_F	Forward slope resistance	$T_j = T_{jmax}$	7.52 mΩ	3.91 mΩ
V_{FM}	Forward voltage, max	Forward current $I_F = 100\text{ A}$, $T_j = T_{jmax}$	1.75 V	1.39 V

THERMAL AND MECHANICAL CHARACTERISTICS

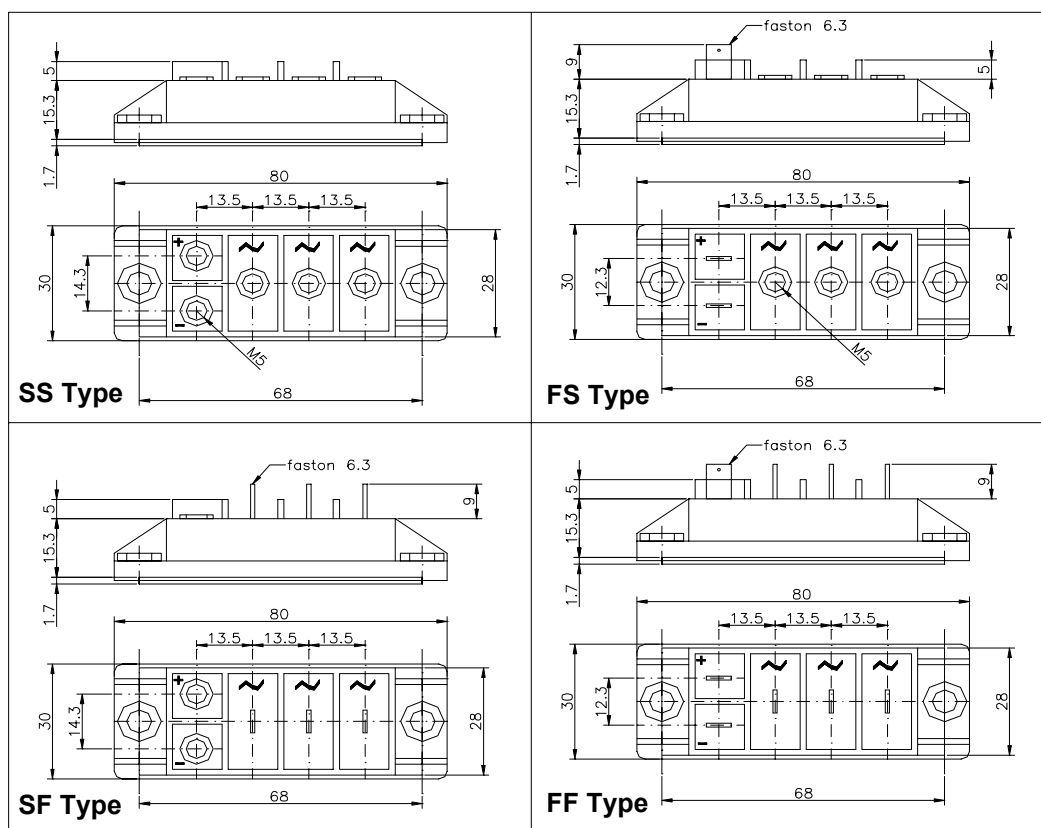
$R_{th(j-c)}$	Thermal resistance (junction to case)	Per junction / per bridge	1.5/0.24 $^{\circ}\text{C/W}$	1.3/0.21 $^{\circ}\text{C/W}$
$R_{th(c-h)}$	Thermal resistance (case to heatsink)		0.15 $^{\circ}\text{C/W}$	0.15 $^{\circ}\text{C/W}$
T_{jmax}	Operating junction temperature		-40 / 150 $^{\circ}\text{C}$	-40 / 150 $^{\circ}\text{C}$
F	Mounting torque +/- 15%		4.5 N·m	4.5 N·m
	Mass		95 g	95 g

Voltage rating

Type number	Voltage code	V_{RRM} max	V_{RSM}
GMG3	12	1200V	1300V
	14	1400V	1500V
	16	1600V	1700V



Outline



Ordering information

GMG3	XX	D	YY	ZZ
1	2		3	4

1:Three-Phase Rectifier Bridge

2: Voltage code: Voltage Rating (VRRM) = Voltage code*100

3: Output Current : 06 = 60 A , 10 = 100A

4: Pinout (see Table)

Pin Out Code	Input side	Output side	Notes
FF	Faston AC	Faston DC	Only 60A types
SF	Screw AC	Faston DC	Only 60A types. M6 screws available. Contact factory
FS	Faston AC	Screw DC	M6 screws available. Contact factory
SS	ScrewAC	Screw DC	M6 screws available. Contact factory