

# GMG3xxD10

## THREE-PHASE RECTIFIER BRIDGE

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

**VOLTAGE UP TO** 0 V  
**AVERAGE OUTPUT CURRENT** 100 A

### BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
V <sub>RRM</sub>	Repetitive peak reverse voltage		1200-1600V
V <sub>RSM</sub>	Repetitive peak off-state voltage		1700 V
I <sub>RRM</sub>	Repetitive peak reverse current, max.	V <sub>R</sub> , single phase, half wave, T <sub>j</sub> = T <sub>jmax</sub>	2 mA
V <sub>INS</sub>	RMS insulation voltage	Any terminal to base - 60 s	3000 V

### FORWARD CHARACTERISTICS

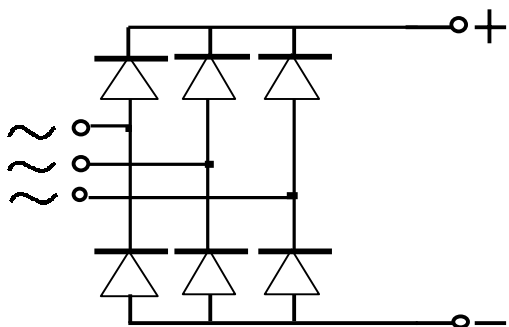
I <sub>o(AV)</sub>	Average DC output current	T <sub>c</sub> = 80 °C - Solder connection	100 A
I <sub>FSM</sub>	Surge current	Non rep. half sine wave, 50 Hz, V <sub>R</sub> = 0 V, T <sub>j</sub> = T <sub>jmax</sub>	540 A
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	Non rep. half sine wave, 50 Hz, V <sub>R</sub> = 0 V, T <sub>j</sub> = T <sub>jmax</sub>	1.46 kA <sup>2</sup> s
V <sub>F(TO)</sub>	Threshold voltage	T <sub>j</sub> = T <sub>jmax</sub>	1.0 V
r <sub>F</sub>	Forward slope resistance	T <sub>j</sub> = T <sub>jmax</sub>	3.91 mΩ
V <sub>FM</sub>	Forward voltage, max	Forward current I <sub>F</sub> = 100 A, T <sub>j</sub> = 25 °C	1.50 V

### THERMAL AND MECHANICAL CHARACTERISTICS

R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	Per junction / per bridge	1.3 / 0.21 °C/W
R <sub>th(c-h)</sub>	Thermal resistance (case to heatsink)		0.15 °C/W
T <sub>jmax</sub>	Operating junction temperature		-40 / 150 °C
F	Mounting torque +/- 15%		4.5 N·m
	Mass		95 g

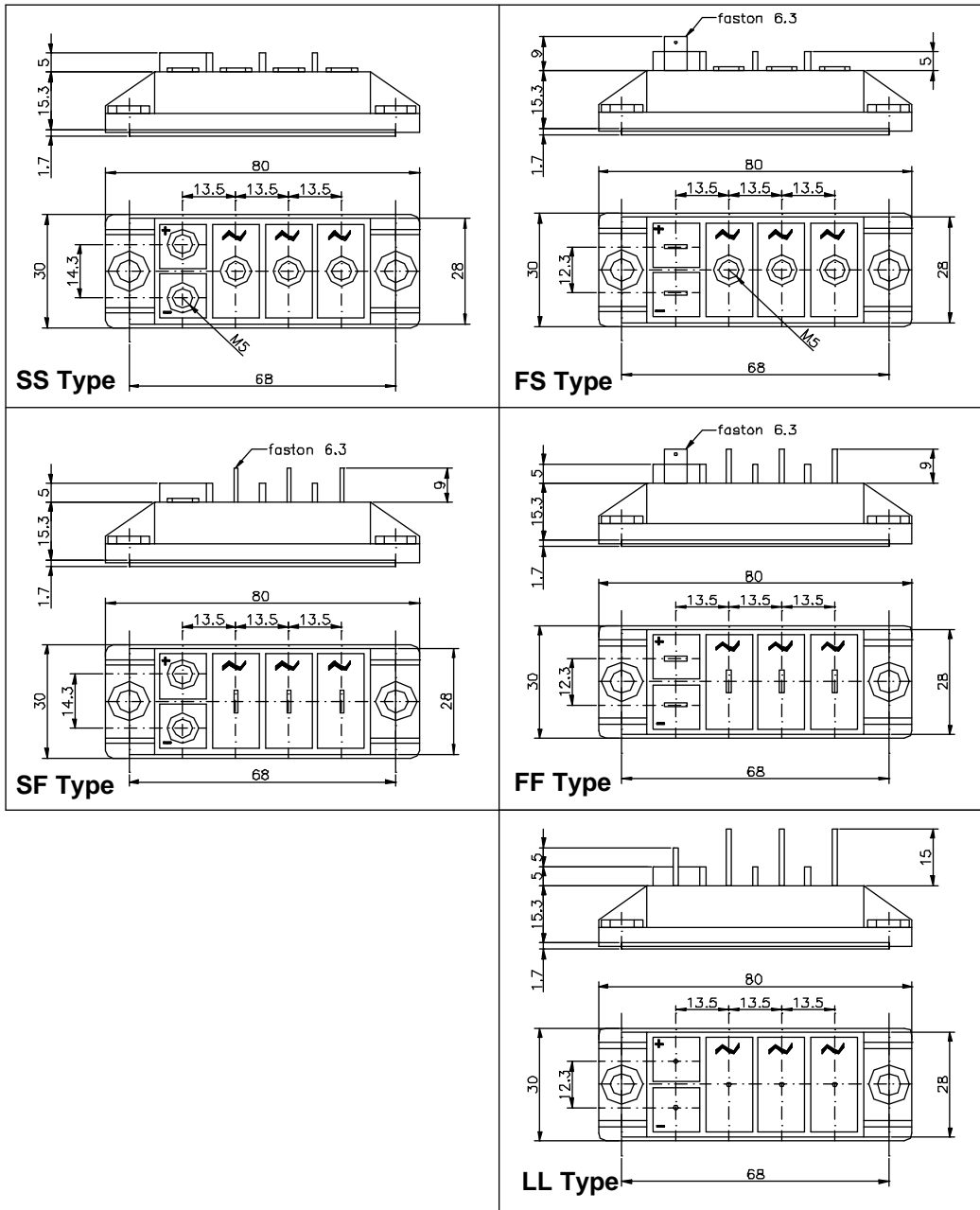
### Voltage rating

Type number	Voltage code	V <sub>RRM</sub> max	V <sub>RSM</sub>
GMG3	12	1200V	1300V
	14	1400V	1500V
	16	1600V	1700V



dimensions in mm

**Outline**



**Ordering information**

<b>GMG3</b>	<b>XX</b>	<b>D</b>	<b>10</b>	<b>YY</b>
1	2	3	4	

- 1: Three-Phase Rectifier Bridge
- 2: Voltage code: Voltage Rating (VRRM) = Voltage code\*100
- 3: Output Current/10
- 4: Pinout (see Table)

<b>FF</b>	<b>Faston AC</b>	<b>Faston DC</b>
<b>SF</b>	<b>ScrewAC</b>	<b>Faston DC</b>
<b>FS</b>	<b>Faston AC</b>	<b>Screw DC</b>
<b>SS</b>	<b>ScrewAC</b>	<b>Screw DC</b>
<b>LL</b>	<b>Wire Lead AC</b>	<b>Wire Lead DC</b>