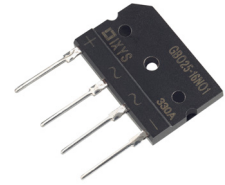
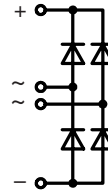


# Single Phase Rectifier Bridge

$I_{dAV} = 25 \text{ A}$   
 $V_{RRM} = 1200-1600 \text{ V}$

$V_{RSM}$ V	$V_{RRM}$ V	Standard Types
1300	1200	GBO 25-12NO1
1700	1600	GBO 25-16NO1



Symbol	Conditions	Maximum Ratings	
$I_{dAVM}$ ①	$T_C = 80^\circ\text{C}$ , sine 180°	25	A
$I_{dAVM}$ ②	$T_C = 25^\circ\text{C}$ , sine 180°	5	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $V_R = 0$	t = 10 ms (50 Hz), sine	370 A
		t = 8.3 ms (60 Hz), sine	390 A
$I^2t$	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine	320 A
		t = 8.3 ms (60 Hz), sine	340 A
$I^2t$	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	t = 10 ms (50 Hz), sine	680 A <sup>2</sup> s
		t = 8.3 ms (60 Hz), sine	640 A <sup>2</sup> s
$T_{VJ}$	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine	510 A <sup>2</sup> s
		t = 8.3 ms (60 Hz), sine	470 A <sup>2</sup> s
$T_{VJ}$		-40...+150	°C
$T_{VJM}$		150	°C
$T_{stg}$		-40...+125	°C
$P_{tot}$		16	W
$M_d$ Weight	Mounting torque (M3) typ.	0.5-0.8 7	Nm g

## Features

- $V_{RRM}$  up to 1600 V
- Low forward voltage drop
- Planar passivated chips
- Low forward voltage drop
- Epoxy meets UL 94V-0

## Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

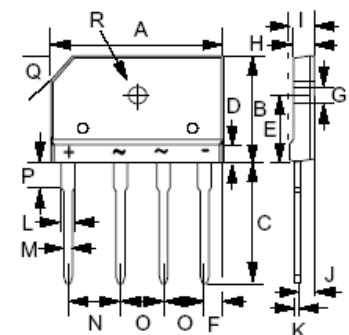
## Advantages

- Easy to mount with one screw
- Space and weight savings

Symbol	Conditions	Characteristic Values	
$I_R$	$V_R = V_{RRM}$ ; $T_{VJ} = 25^\circ\text{C}$	≤ 0.05	mA
	$V_R = V_{RRM}$ ; $T_{VJ} = T_{VJM}$	≤ 1.5	mA
$V_F$	$I_F = 12.5 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$	≤ 1.1	V
$V_{T0}$	For power-loss calculations only	0.89	V
$r_T$	$T_{VJ} = T_{VJM}$	12.2	mΩ
$R_{thJC}$	per diode, DC current	4.3	K/W
	per module	1.1	K/W
$R_{thJA}$	per diode, DC current	50	K/W
	per module	12.5	K/W
$d_{S1}, d_{A1}$	Creeping/Striking distance leads to heatsink	2.9	mm
$d_{S1}, d_{A1}$	Creeping/Striking distance lead to lead	5.6	mm
$a$	Max. allowable acceleration	50	m/s <sup>2</sup>

Data according to IEC 60747 and refer to a single diode unless otherwise stated

$I_{dAVM}$  = bridge output current for resistive load ① mounted on heatsink; ② without heatsink



DIM.	MIN.	MAX.
A	29.70	30.30
B	19.70	20.30
C	17.0	18.0
D	4.70	4.90
E	10.80	11.20
F	2.30	2.70
G	3.10	3.40
H	3.40	3.80
I	4.40	4.80
J	2.50	2.90
K	0.60	0.80
L	2.00	2.40
M	0.90	1.10
N	9.80	10.20
O	7.30	7.70
P	3.80	4.20
Q	(3.0) x 45°	
R	3.10 ∅	3.40 ∅

All Dimensions in millimeter

IXYS reserves the right to change limits, test conditions and dimensions.