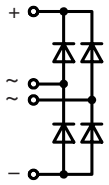
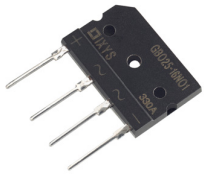
Single Phase Rectifier Bridge

I_{dAV} = 25 A
V_{RRM} = 1200-1600 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°C, sine 180°		25	A
I_{dAVM} ②	T_C = 25°C, sine 180°		5	A
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	370	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	390	A
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	320	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	340	A
I^2t	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	680	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	640	A^2s
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	510	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	470	A^2s
T_{VJ}			-40...+150	°C
T_{VJM}			150	°C
T_{stg}			-40...+125	°C
P_{tot}			16	W
M_d	Mounting torque (M3)		0.5-0.8	Nm
Weight	typ.		7	g

Symbol	Conditions		Characteristic Values		
I_R	V_R = V_{RRM};	T_{VJ} = 25°C	≤	0.05	mA
	V_R = V_{RRM};	T_{VJ} = T_{VJM}	≤	1.5	mA
V_F	I_F = 12.5 A;	T_{VJ} = 25°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^2

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

Features

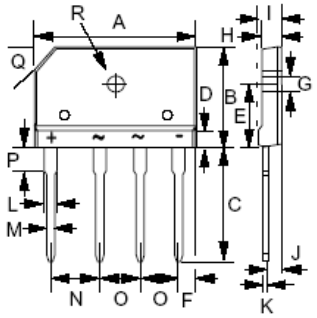
- V_{RRM} up to 1600 V
- Low forward voltage drop
- Planar passivated chips
- Low forward voltage drop
- Epoxy meets UL 94V-0

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



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 Ø	3.40 Ø
All Dimensions in millimeter		

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