

SKD 83



Power Bridge Rectifiers

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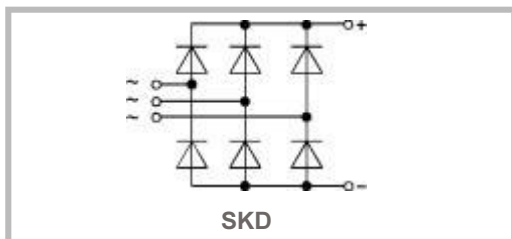
Features

- Glass passivated silicon chips
- Low thermal impedance through use of direct copper bonded aluminum substrate (DCB) base plate
- Blocking voltage up to 1800 V
- Suitable for PCB mounting and wave soldering
- For applications with high vibrations we recommend to fasten the bridge to the pcb with 4 selftapping screw

Typical Applications

- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

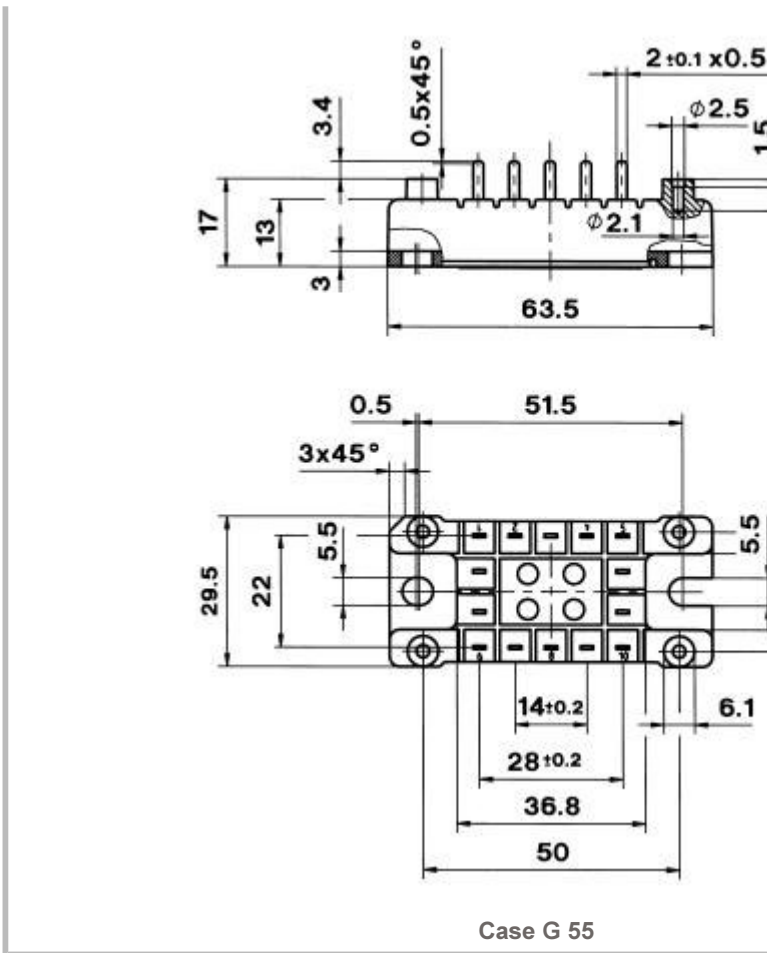
1) Freely suspended or mounted on an insulator
 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
 3) $T_{solder} = 250 \pm 10 \text{ }^\circ\text{C}$ (10 s)



V_{RSM} V	V_{RRM}, V_{DRM} V	I_T
500	400	SKI
900	800	SKI
1300	1200	SKI
1600	1400	SKI
1700	1600	SKI
1900	1800	SKI

Symbol	Conditions	
I_D	$T_s = 95 \text{ }^\circ\text{C}$ $T_a = 45 \text{ }^\circ\text{C}$; isolated ¹⁾ $T_a = 45 \text{ }^\circ\text{C}$; chassis ²⁾ $T_a = 45 \text{ }^\circ\text{C}$; P5A/100 (R4A/120) $T_a = 35 \text{ }^\circ\text{C}$; P1A/120F	
I_{FSM}	$T_{vj} = 25 \text{ }^\circ\text{C}$; 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$; 10 ms	
i^2t	$T_{vj} = 25 \text{ }^\circ\text{C}$; 8,3 ... 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$; 8,3 ... 10 ms	
V_F $V_{(TO)}$ r_T I_{RD}	$T_{vj} = 25 \text{ }^\circ\text{C}$; $I_F = 80 \text{ A}$ $T_{vj} = 150 \text{ }^\circ\text{C}$ $T_{vj} = 150 \text{ }^\circ\text{C}$ $T_{vj} = 25 \text{ }^\circ\text{C}$; $V_{DD} = V_{DRM}$; $V_{RD} = V_{RRM}$ $T_{vj} = 150 \text{ }^\circ\text{C}$; $V_{RD} = V_{RRM}$	
$R_{th(j-s)}$ $R_{th(j-a)}$ T_{vj} T_{stg}	per diode total isolated ¹⁾ chassis ²⁾	
V_{isol} M_s M_t a m	a. c. 50 Hz; r.m.s.; 1 s / 1 min. to heatsink; SI units	
Case		

Cases / Circuits



Diagrams

