

Silicon Carbide Schottky Rectifier Bridge

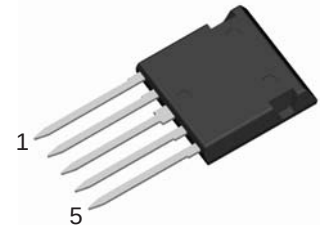
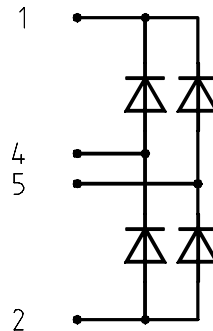
in ISOPLUS i4-PAC™

FBS 16-06SC

$$V_{RRM} = 600 \text{ V}$$

$$I_{D(AV)M} = 11 \text{ A}$$

$$C_{junction} = 21 \text{ pF}$$



Rectifier Bridge

Symbol	Conditions	Maximum Ratings	
V_{RRM}		600	V
I_{FAV}	$T_C = 90^\circ\text{C}$; sine 180° (per diode)	5	A
$I_{D(AV)M}$	$T_C = 90^\circ\text{C}$	11	A
I_{FSM}	$T_{VJ} = 25^\circ\text{C}$; $t = 10 \text{ ms}$; sine 50 Hz	20	A
P_{tot}	$T_C = 25^\circ\text{C}$ (per diode)	27	W

Symbol	Conditions	Characteristic Values ($T_{VJ} = 25^\circ\text{C}$, unless otherwise specified)		
		min.	typ.	max.
V_F	$I_F = 6 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 125^\circ\text{C}$		1.5 1.6	1.8 V V
I_R	$V_R = V_{RRM}$; $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 125^\circ\text{C}$		0.05	0.2 mA mA
C_j	$V_R = 400 \text{ V}$; $T_{VJ} = 125^\circ\text{C}$		21	pF
R_{thJC} R_{thJS}	(per diode)		8.6	5.6 K/W K/W

Features

- Silicon Carbide Schottky Diodes
 - no reverse recovery at turn off - only charge of junction capacity - soft turn off waveform
 - no forward recovery at turn on
 - switching behaviour independent of temperature
 - low leakage current
- ISOPLUS i4-PAC(TM) package
 - isolated back surface
 - low coupling capacity between pins and heatsink
 - enlarged creepage towards heatsink
 - application friendly pinout
 - high reliability
 - industry standard outline

Applications

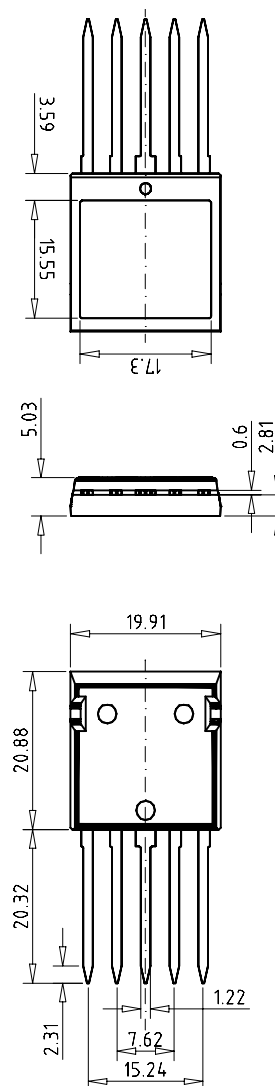
- output rectifiers of high end switched mode power supplies
- other high frequency rectifiers

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

Component

Symbol	Conditions	Maximum Ratings	
T_{VJ}		-55...+175	°C
T_{stg}		-55...+125	°C
V_{ISOL}	$I_{ISOL} \leq 1 \text{ mA}; 50/60 \text{ Hz}$	2500	V~
F_c	mounting force with clip	20...120	N

Symbol	Conditions	Characteristic Values		
		min.	typ.	max.
C_p	coupling capacity between shorted pins and mounting tab in the case		40	pF
d_s, d_A	pin - pin	1.7		mm
d_s, d_A	pin - backside metal	5.5		mm
Weight			9	g

Dimensions in mm (1 mm = 0.0394")




LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.