## Circuit Block for Bi-Directional Switch

HGCB-6C-401100 HGCB-2C-401100



#### **Abstract**

- Circuit block of bidirectional switching circuit with SiC-MOSFET
- Drain connected 2 SiC-MOSFET power diveces, gate drive circuit, gate power supply on board
- Casing for 3 board mounting and cooling
- Circuit protection against shoot-through, under voltage of gate drive
- Capacitor, Reactor, Power Supply and Cabling shall be provided by customer
- Snubber circuit should be designed to fit to operational parameter

#### **Features**

## **Single Board Bidirectional Switching Circuit**

- √ Various types of topology are realized by combination such as Matrix Converter
- ✓ Isolation Implemented

## **Useful Option for Combination**

- ✓ Forced cooling casing for 3 board mounting
- ✓ Control signal cable is attached
- ✓ Line inductance can be reduced by copper bar (Option)

# **Free Circuit Diagram Information Provided**

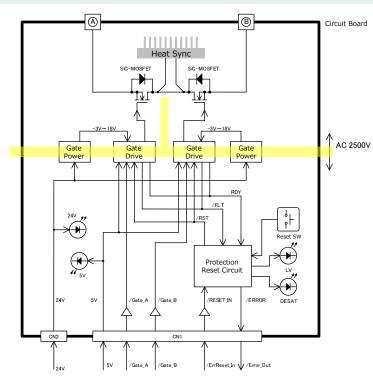
- ✓ Various Customization Available
- ✓ For Reference of User's Circuit Design

Tokyo Front Terrace 8F, 2-3-14 Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-0002, Japan TEL: 03-5495-7957 FAX: 03-5495-7958

### **Specifications**

## Block Diagram: HGCB-2C-401100

Subject	Specification	Note
Voltage Range	0V~400V	A-B Port
Maximum Current	10Arms	A and B Port
Maximum Switching Frequency	200kHz	
Minimum Dead-time	200ns	
Power Supply	DC24V and DC5V	
Size	W 166mm D 66mm H 116mm	HGCB-6C-401100
	W 122mm D 60mm H 23mm	HGCB-2C-401100



### **Example: Matrix Converter**

