V-SERIES PRIMEPACK IGBT MODULES

Product Data Sheet

3AXD50000711901 2MBI1000VXB-170E-50

1700 V dual IGBT module

SEMICONDUCTOR CONFIGURATION	COLLECTOR-EMITTER BLOCKING VOLTAGE	CONTINUOUS COLLECTOR CURRENT	PULSE COLLECTOR CURRENT
2-in-1 IGBT module	**1700 V**	**1000 A at Tc=100 C; 1400 A at Tc=25 C**	**2000 A for 1 ms**

Fuji Electric 2MBI1000VXB-170E-50 is a V-series two-in-one IGBT module in the M272 PrimePACK package. It combines two power-switch positions for converter assemblies and is rated at 1700 V collector-emitter blocking voltage and 1000 A continuous collector current at a 100 C case temperature. The existing record also carries ABB spare identifier 3AXD50000711901.

01 TECHNICAL DATA

Semiconductor configuration	2-in-1 IGBT module
Collector-emitter blocking voltage	1700 V
Continuous collector current	1000 A at Tc=100 C; 1400 A at Tc=25 C
Pulse collector current	2000 A for 1 ms
Gate-emitter absolute limit	+/-20 V
Maximum junction temperature	175 C
Switching junction-temperature limit	150 C
Storage temperature	-40 to +150 C
Isolation withstand	4000 V AC for 1 minute
Gate threshold voltage	6.0-7.0 V at VCE=20 V, IC=1 A

02 ADDITIONAL PRODUCT DATA

Internal gate resistance	1.17 ohm typical
Input capacitance	94 nF typical at VCE=10 V, 1 MHz
IGBT junction-to-case thermal resistance	0.024 C/W maximum per device
Mounting screw torque	3.0-6.0 N m, M5
Main terminal torque	8.0-10.0 N m, M8

03 PRODUCT FUNCTION

The semiconductor uses voltage-driven gates, a low-inductance structure and screw terminals. Its absolute gate-emitter limit is +/-20 V, while the permitted junction temperature during switching is 150 C. The module includes a thermistor; the manufacturer specifies separate mounting, main-terminal and sense-terminal torque requirements and a 4000 V AC isolation test under the stated connection conditions.

04 SYSTEM COMPATIBILITY

Keep gate-emitter excursions within the +/-20 V absolute maximum and respect the 150 C switching junction-temperature limit. The internal gate resistance is 1.17 ohm typical; the external driver and switching conditions remain separately engineered. Use the manufacturer thermal-resistance data to assess junction temperature rather than relying only on the heatsink surface reading.

05 REFERENCE

Fuji Electric 2MBI1000VXB-170E-50, 7570c, March 2014.

AMIKON PRODUCT SUPPORT
+86-18020776786 INFO@AMIKON.CN AMIKONG.COM