ACS800 ECONOPACK+

Product Data Sheet

FS450R17KE3/AGDR-71C

IGBT and gate-driver assembly

IGBT COLLECTOR-EMITTER BLOCKING VOLTAGE	IGBT NOMINAL COLLECTOR CURRENT	IGBT DC COLLECTOR CURRENT AT CASE 25 C	IGBT REPETITIVE PEAK CURRENT
1700 V	**450 A at case 80 C**	**605 A**	**900 A for 1 ms**

ABB FS450R17KE3/AGDR-71C combines an EconoPACK+ sixpack IGBT power module with an AGDR-71C gate-driver board for the applicable drive power stage. ABB identifies the assembly as a 1700 V, 450 A IGBT spare, while the FS450R17KE3 semiconductor uses trench/fieldstop IGBT technology and antiparallel diodes.

01 TECHNICAL DATA

IGBT collector-emitter blocking voltage	1700 V
IGBT nominal collector current	450 A at case 80 C
IGBT DC collector current at case 25 C	605 A
IGBT repetitive peak current	900 A for 1 ms
IGBT maximum dissipation	2250 W at case 25 C
IGBT gate-emitter limit	+/-20 V
IGBT typical saturation voltage	2.00 V at 450 A, junction 25 C
IGBT gate threshold range	5.2 to 6.4 V at junction 25 C
IGBT typical gate charge	5.10 microcoulomb
IGBT internal gate resistor	1.7 ohm

Infineon FS450R17KE3 Rev. 2.3, pages 1-2 and 7-8; ABB assembly 68444217 product details.

02 ADDITIONAL PRODUCT DATA

IGBT input capacitance	40.5 nF at 1 MHz
IGBT reverse-transfer capacitance	1.30 nF at 1 MHz
Semiconductor configuration	Sixpack
Module housing	EconoPACK+ B
Gate-driver board designation	AGDR-71C

03 PRODUCT FUNCTION

The IGBT is rated for 450 A continuous collector current at an 80 C case temperature, or 605 A at a 25 C case temperature, with a 900 A repetitive peak for 1 ms. Its gate-emitter limit is +/-20 V and typical saturation voltage is 2.00 V at 450 A and a 25 C junction. These semiconductor ratings describe FS450R17KE3; they are not independent AGDR-71C supply ratings.

04 SYSTEM COMPATIBILITY

Retain the gate connections, DC terminals, phase connections and thermal interface specified for the existing power stage. The semiconductor current capability changes with case temperature, so a 605 A figure at 25 C must not replace the 450 A nominal rating at 80 C.

05 REFERENCE

Infineon FS450R17KE3 Rev. 2.3, pages 1-2 and 7-8; ABB assembly 68444217 product details.

AMIKON PRODUCT SUPPORT

+86-18020776786 INFO@AMIKON.CN **AMIKONG.COM**