

查询"SK20GH065_06"供应商



SEMITOP® 2

IGBT Module

SK20GH065

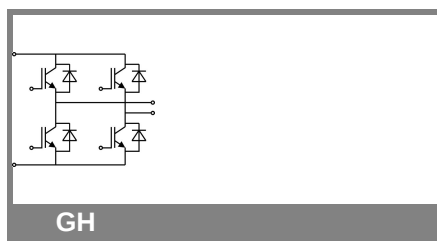
Target Data

Features

- Compact design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- N-channel homogeneous Silicon structure (NPT-NonPunchThrough IGBT)
- High short circuit capability
- Low tail current with low temperature dependence
- UL recognized, file no E63532

Typical Applications

- Switching (not for linear use)
- Inverter
- Switched mode power supplies
- UPS



Absolute Maximum Ratings		$T_s = 25\text{ °C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
IGBT			
V_{CES}	$T_j = 25\text{ °C}$	600	V
I_C	$T_j = 125\text{ °C}$	$T_s = 25\text{ °C}$	24 A
		$T_s = 80\text{ °C}$	18 A
I_{CRM}	$I_{CRM} = 2 \times I_{Cnom}$	40	A
V_{GES}		± 20	V
t_{psc}	$V_{CC} = 300\text{ V}$; $V_{GE} \leq 20\text{ V}$; $T_j = 125\text{ °C}$ $V_{CES} < 600\text{ V}$	10	μs
Inverse Diode			
I_F	$T_j = 125\text{ °C}$	$T_s = 25\text{ °C}$	25 A
		$T_s = 80\text{ °C}$	18 A
I_{FRM}	$I_{FRM} = 2 \times I_{Fnom}$	40	A
Module			
$I_{t(RMS)}$			A
T_{vj}		-40 ... +150	$^{\circ}\text{C}$
T_{stg}		-40 ... +125	$^{\circ}\text{C}$
V_{isol}	AC, 1 min.	2500	V

Characteristics			T _s = 25 °C, unless otherwise specified			
Symbol	Conditions		min.	typ.	max.	Units
IGBT						
V _{GE(th)}	V _{GE} = V _{CE} , I _C = 0,5 mA		3	4	5	V
I _{CES}	V _{GE} = 0 V, V _{CE} = V _{CES} T _j = 25 °C				0,07	mA
I _{GES}	V _{CE} = 0 V, V _{GE} = 20 V T _j = 25 °C				120	nA
V _{CE0}				1		V
				1,1		V
r _{CE}	V _{GE} = 15 V T _j = 25°C T _j = 125°C					mΩ
				55		mΩ
V _{CE(sat)}	I _{Cnom} = 20 A, V _{GE} = 15 V T _j = 25°C _{chiplev.} T _j = 125°C _{chiplev.}			2		V
				2,2		V
C _{ies}	V _{CE} = 25, V _{GE} = 0 V f = 1 MHz			1,1		nF
C _{oes}				0,107		nF
C _{res}				0,063		nF
t _{d(on)}	R _{Gon} = 30 Ω	V _{CC} = 300V I _{Cnom} = 20A T _j = 125 °C V _{GE} =±15V		21		ns
t _r				28		ns
E _{on}	0,6				mJ	
t _{d(off)}	170				ns	
t _f	20				ns	
E _{off}	0,4				mJ	
R _{th(j-s)}	per IGBT				1,7	K/W



IGBT Module

SK20GH065

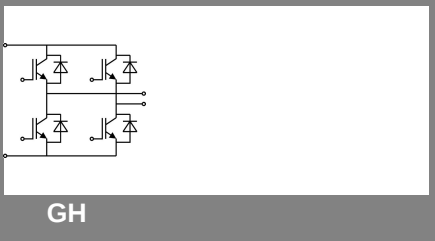
Target Data

Features

- Compact design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- N-channel homogeneous Silicon structure (NPT-NonPunchThrough IGBT)
- High short circuit capability
- Low tail current with low temperature dependence
- UL recognized, file no E63532

Typical Applications

- Switching (not for linear use)
- Inverter
- Switched mode power supplies
- UPS

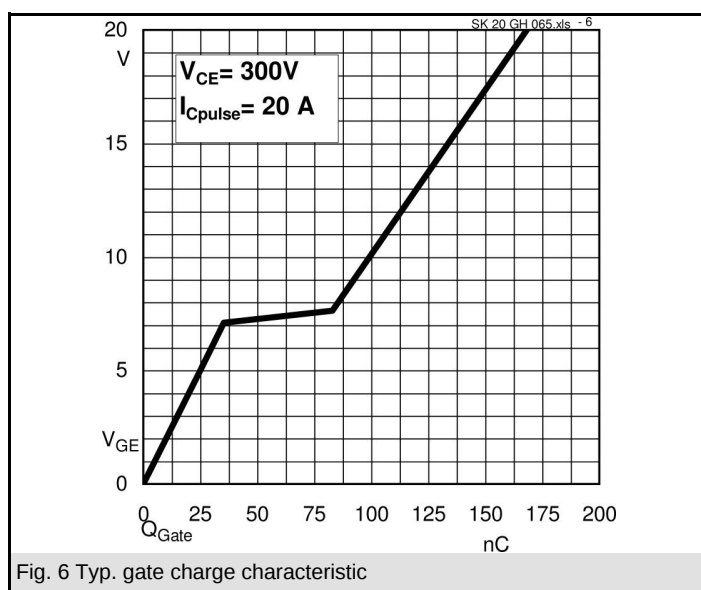
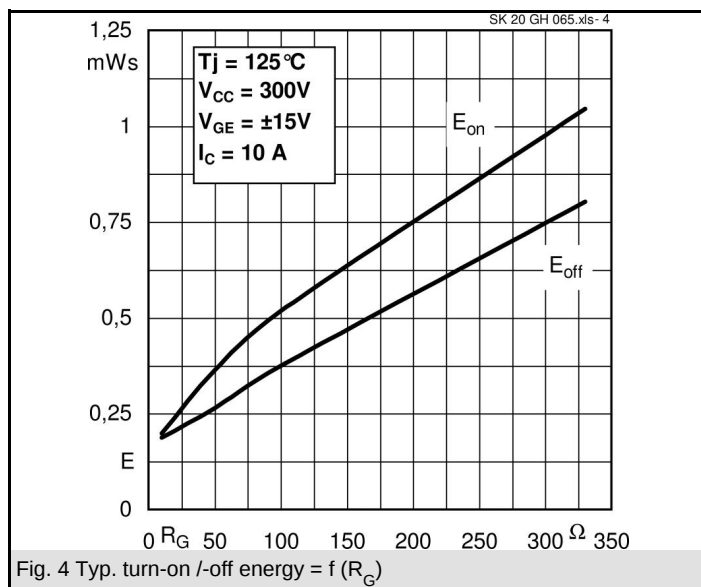
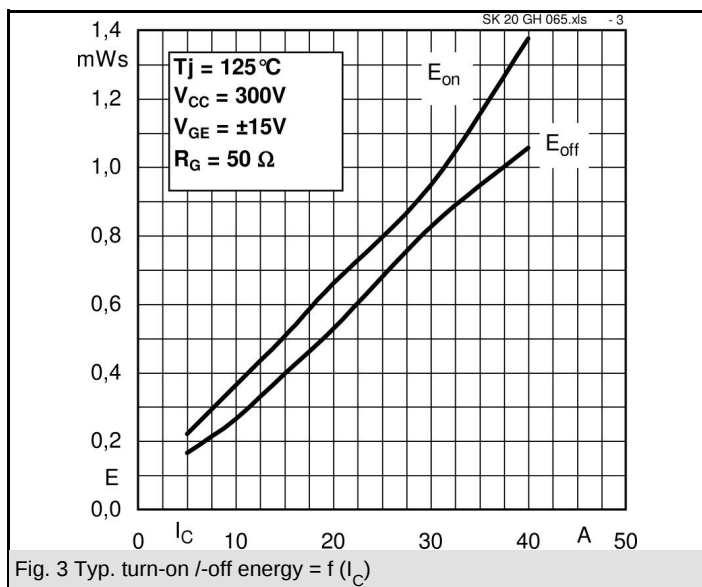
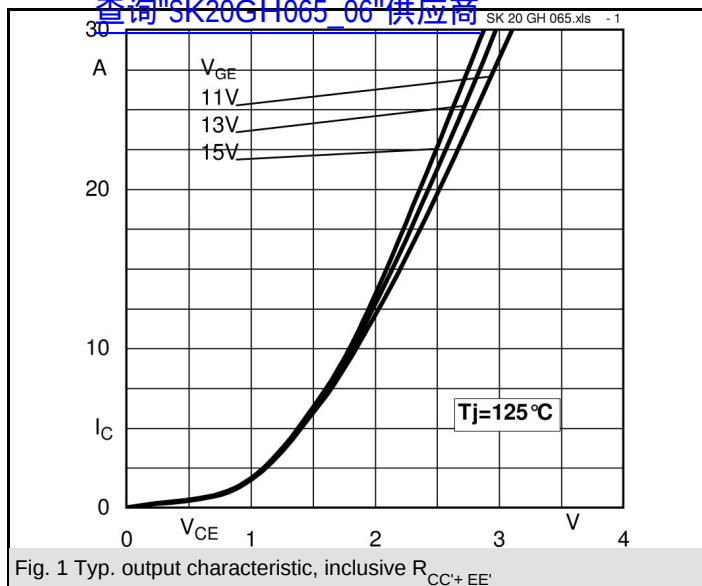


Characteristics						
Symbol	Conditions		min.	typ.	max.	Units
Inverse Diode						
V _F = V _{EC}	I _{Fnom} = 20 A; V _{GE} = 0 V	T _j = 25 °C _{chiplev.}		1,6		V
		T _j = 125 °C _{chiplev.}		1,6		V
V _{F0}		T _j = 25 °C				V
		T _j = 125 °C		0,9		V
r _F		T _j = 25 °C		30		mΩ
		T _j = 125 °C		33		mΩ
I _{RRM}	I _{Fnom} = A	T _j = 125 °C				A
Q _{rr}	V _R = 300V					μC
E _{rr}						mJ
R _{th(j-s)D}	per diode				1,7	K/W
M _s	to heat sink				2	Nm
w				19		g

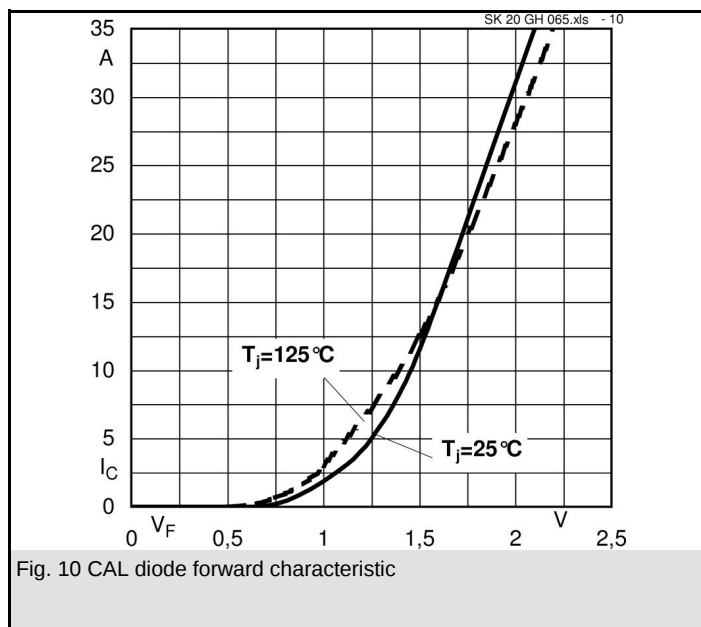
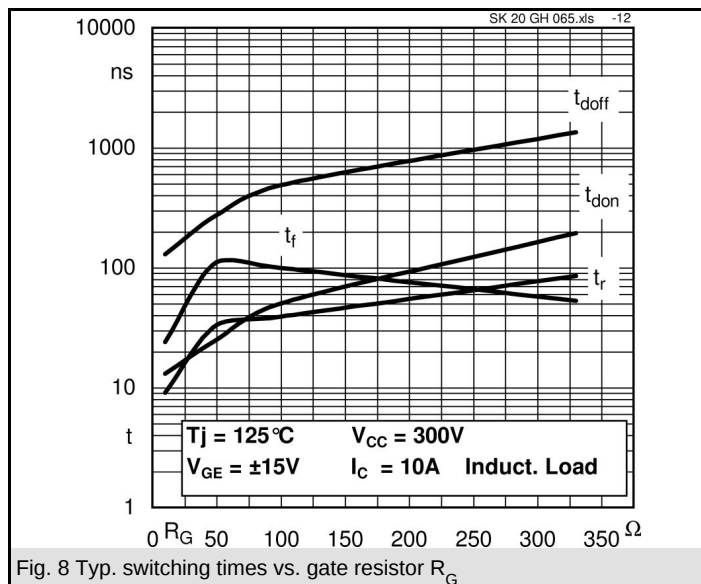
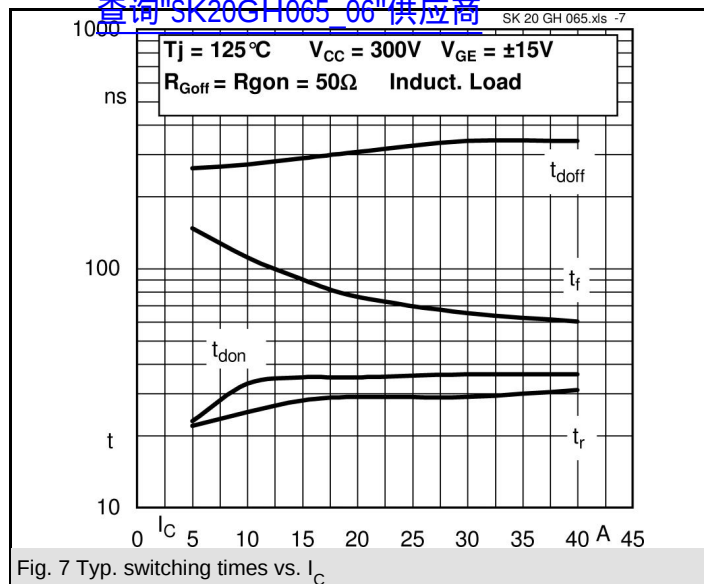
This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, Chapter IX.

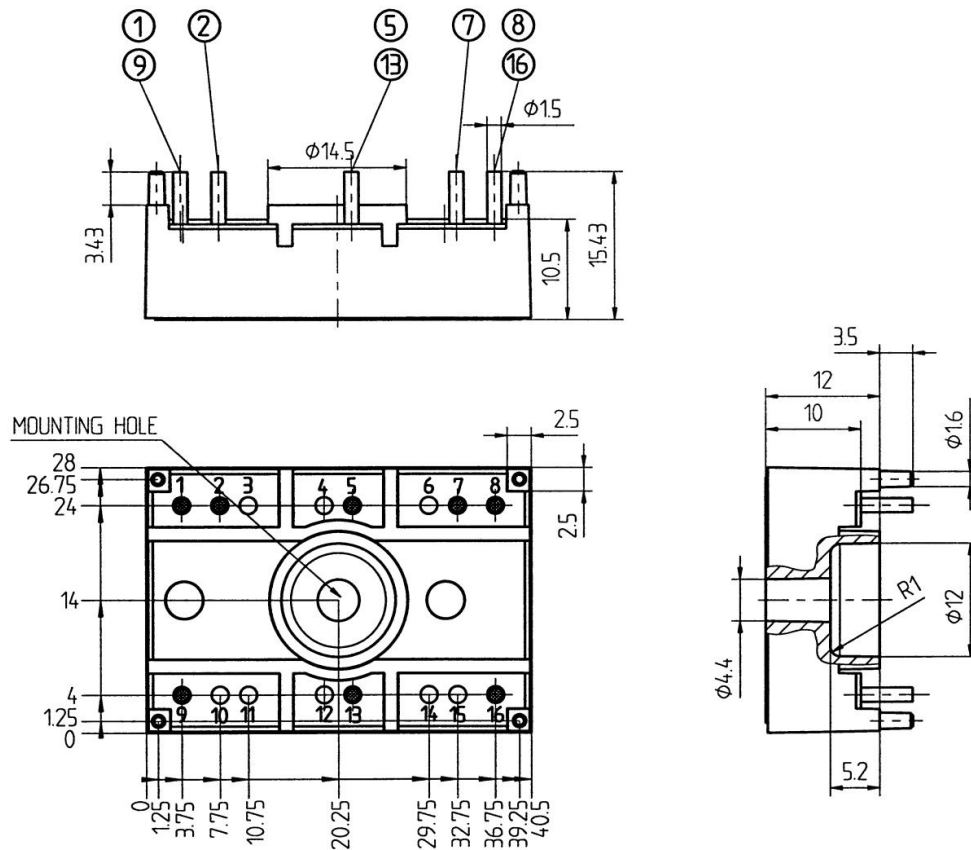
This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.

查询"SK20GH065_06"供应商

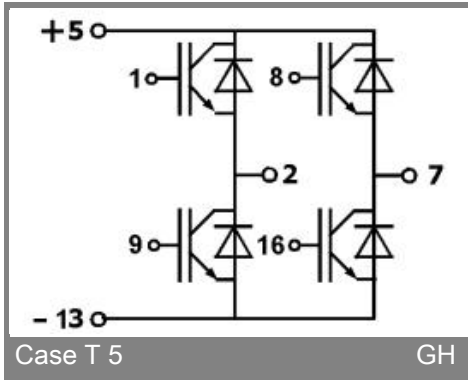


查询"SK20GH065 06"供应商





Case T5 (Suggested hole diameter, in the PCB, for solder pins and plastic mounting pins: 2mm)



Case T 5

GH