

[查询"SK25GH063_07"供应商](#)
SEMITOP[®] 2

IGBT Module

SK25GH063

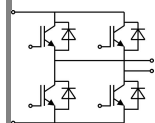
Preliminary Data

Features

- Compact design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- N channel, homogeneous Silicon structure (NPT-Non punchthrough 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



GH

Absolute Maximum Ratings		T _s = 25 °C, unless otherwise specified	
Symbol	Conditions	Values	Units
IGBT			
V _{CES}	T _j = 25 °C	600	V
I _C	T _j = 125 °C T _s = 25 °C T _s = 80 °C	30 21	A A
I _{CRM}	I _{CRM} = 2 x I _{Cnom}	60	A
V _{GES}		± 20	V
t _{psc}	V _{CC} = 300 V; V _{GE} ≤ 20 V; T _j = 125 °C V _{CES} < 600 V	10	µs
Inverse Diode			
I _F	T _j = 150 °C T _s = 25 °C T _s = 80 °C	36 24	A A
I _{FRM}	I _{FRM} = 2 x I _{Fnom}		A
I _{FSM}	t _p = 10 ms; half sine wave T _j = 150 °C	200	A
Module			
I _{t(RMS)}			A
T _{vj}		-40 ... +150	°C
T _{stg}		-40 ... +125	°C
V _{isol}	AC, 1 min.	2500	V

Characteristics		$T_s = 25\text{ °C}$, unless otherwise specified			
Symbol	Conditions	min.	typ.	max.	Units
IGBT					
$V_{GE(th)}$	$V_{GE} = V_{CE}$, $I_C = 0,7\text{ mA}$	4,5	5,5	6,5	V
I_{CES}	$V_{GE} = 0\text{ V}$, $V_{CE} = V_{CES}$			$T_j = 25\text{ °C}$	0,1
				$T_j = 125\text{ °C}$	mA
I_{GES}	$V_{CE} = 0\text{ V}$, $V_{GE} = 30\text{ V}$			$T_j = 25\text{ °C}$	120
				$T_j = 125\text{ °C}$	nA
V_{CE0}				$T_j = 25\text{ °C}$	1
				$T_j = 125\text{ °C}$	V
r_{CE}	$V_{GE} = 15\text{ V}$			$T_j = 25\text{ °C}$	37
				$T_j = 125\text{ °C}$	m Ω
$V_{CE(sat)}$	$I_{Cnom} = 30\text{ A}$, $V_{GE} = 15\text{ V}$			$T_j = 25\text{ °C}_{chipleve.}$	2,1
				$T_j = 125\text{ °C}_{chipleve.}$	2,5
C_{ies}	$V_{CE} = 25$, $V_{GE} = 0\text{ V}$				1,3
C_{oes}					0,15
C_{res}					0,1
$t_{d(on)}$	$R_{Gon} = 33\text{ }\Omega$			$V_{CC} = 300\text{ V}$	37
t_r				$I_{Cnom} = 25\text{ A}$	40
E_{on}	$R_{Goff} = 33\text{ }\Omega$			$T_j = 125\text{ °C}$	1,1
$t_{d(off)}$					200
t_f				$V_{GE} = \pm 15\text{ V}$	30
E_{off}					0,8
$R_{th(j-s)}$	per IGBT			1,4	K/W



IGBT Module

SK25GH063

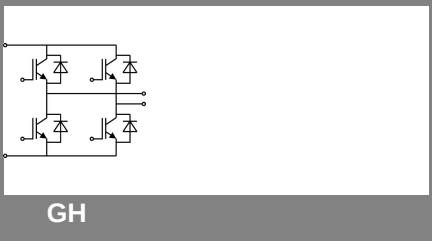
Preliminary Data

Features

- Compact design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- N channel, homogeneous Silicon structure (NPT-Non punchthrough 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

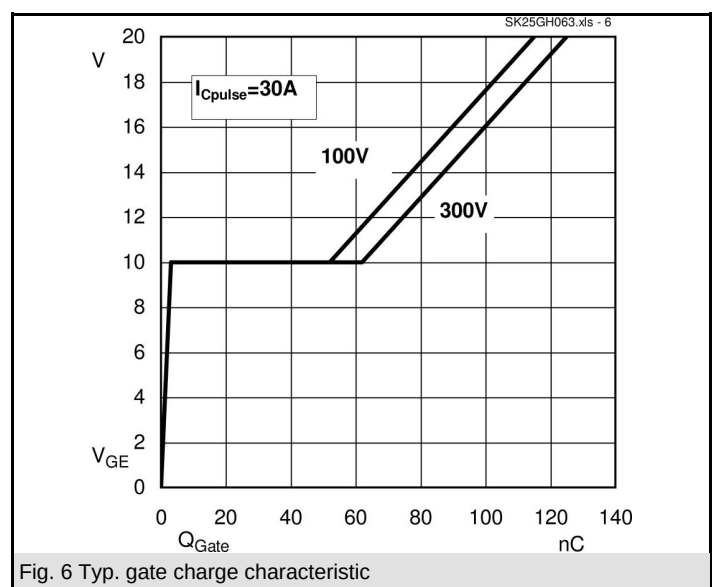
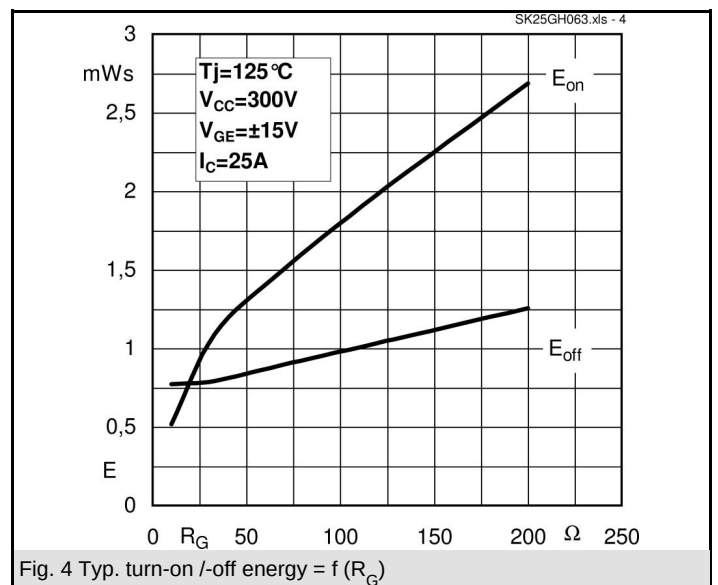
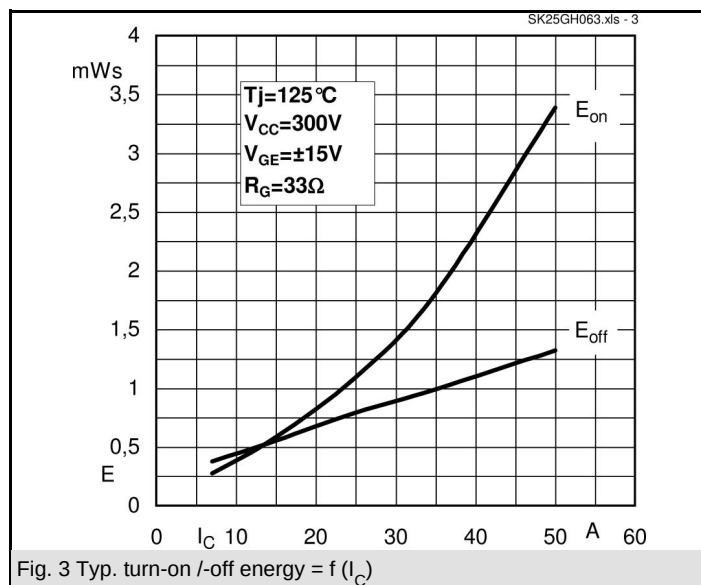
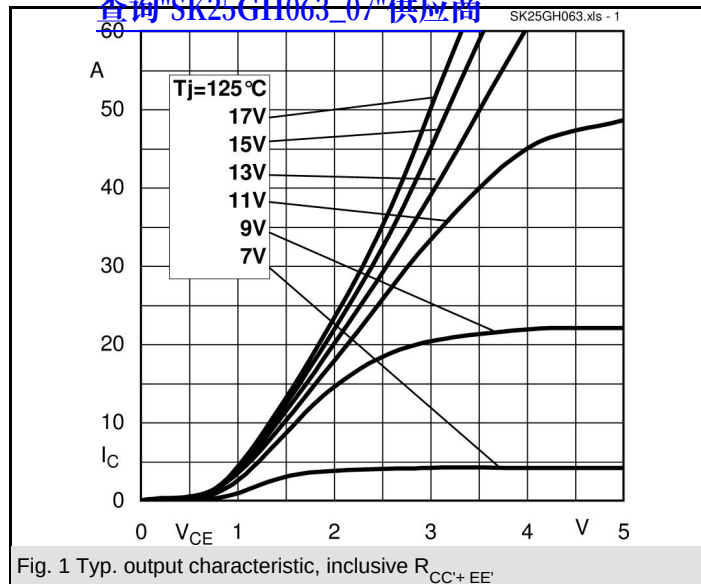


Characteristics						
Symbol	Conditions		min.	typ.	max.	Units
Inverse Diode						
V _F = V _{EC}	I _{Fnom} = 25 A; V _{GE} = 0 V	T _j = 25 °C _{chiplev.}		1,45	1,7	V
		T _j = 125 °C _{chiplev.}		1,4	1,75	V
V _{F0}		T _j = 125 °C		0,85	0,9	V
r _F		T _j = 125 °C		22	32	mΩ
I _{RRM}	I _{Fnom} = 25 A di/dt = -500 A/μs V _{CC} = 300V	T _j = 125 °C		16		A
Q _{rr}				2		μC
E _{rr}				0,25		mJ
R _{th(j-s)D}	per diode				1,7	K/W
M _s	to heat sink M1				2	Nm
w				21		g

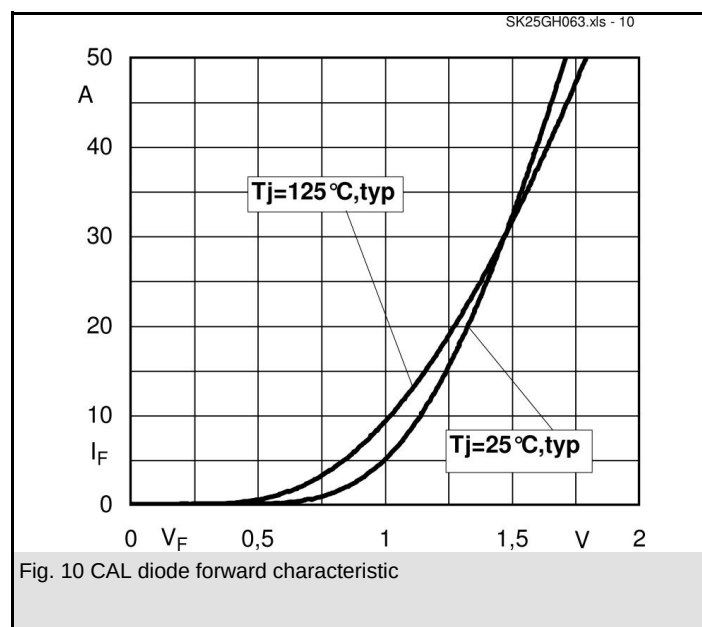
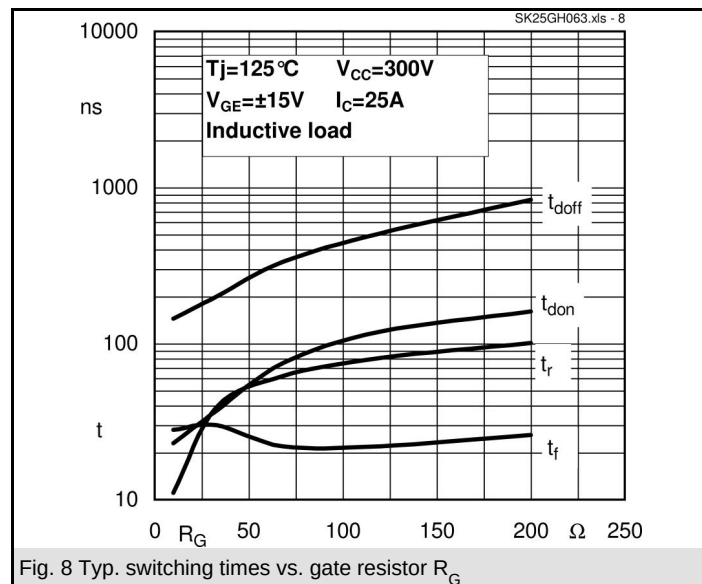
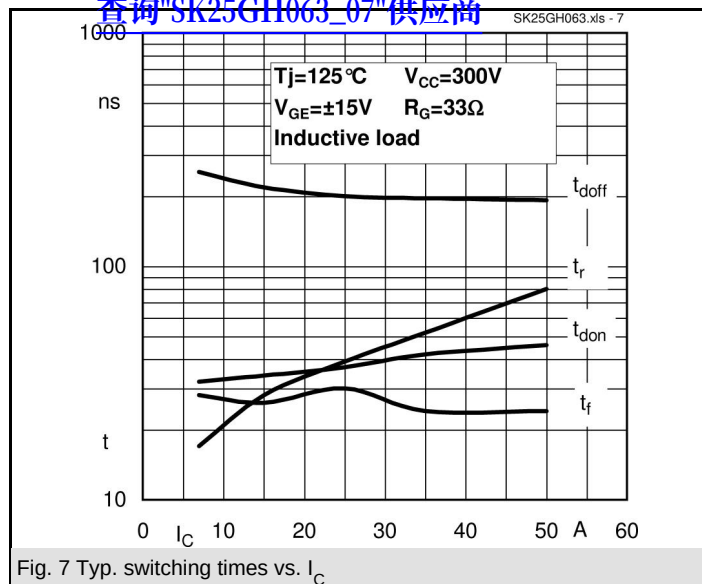
This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, Chapter IX.

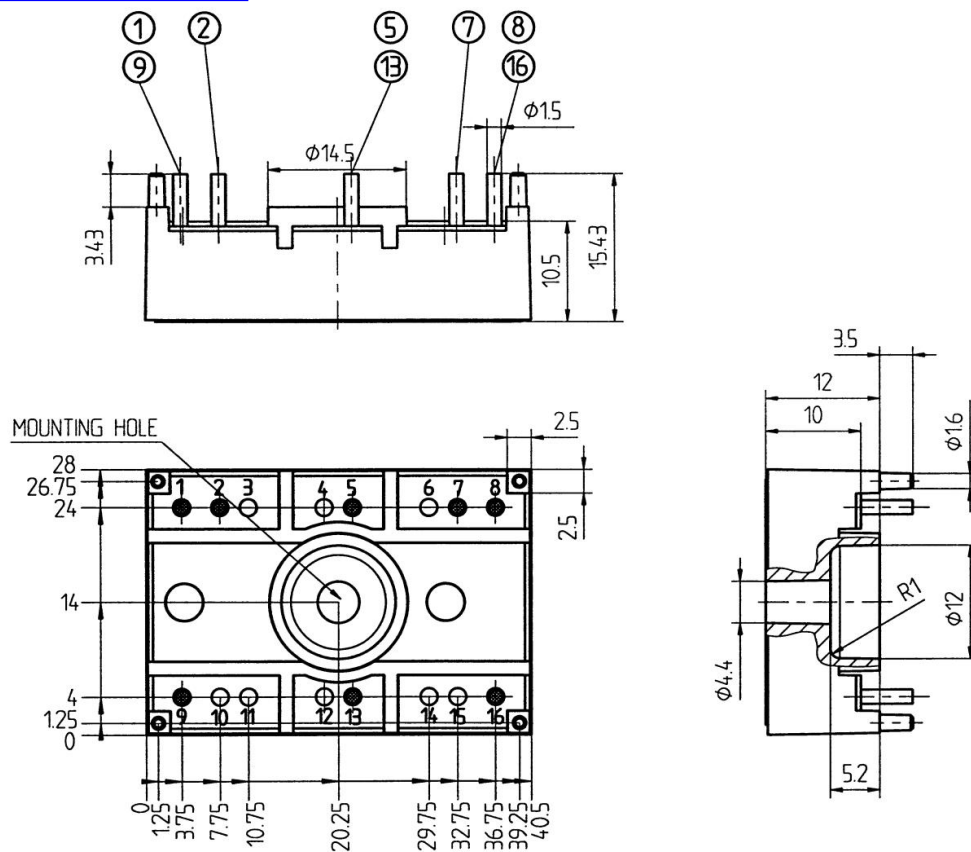
This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.

查询"SK25GH063_07"供应商



查询"SK25GH063_07"供应商





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

