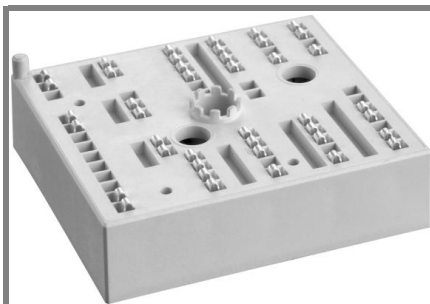


SKiiP 26AC12T4V1



MiniSKiiP®2

3-phase bridge inverter

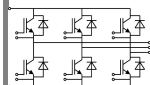
SKiiP 26AC12T4V1

Target Data

Features

- Trench 4 IGBT's
- Robust and soft freewheeling diodes in CAL technology
- Highly reliable spring contacts for electrical connections
- UL recognised file no. E63532

Typical Applications

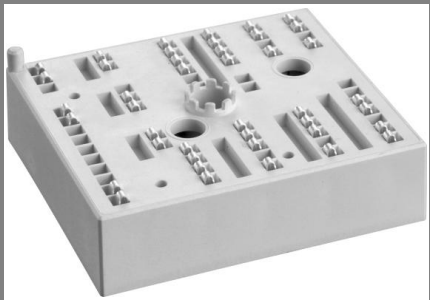


AC

Absolute Maximum Ratings		T _c = 25 °C, unless otherwise specified		
Symbol	Conditions		Values	Units
IGBT				
V _{CES}	T _j = 25 °C		1200	V
I _C	T _j = 175 °C	T _c = 25 °C	96	A
		T _c = 70 °C	78	A
I _{CRM}	I _{CRM} = 3xI _{Cnom}		225	A
V _{GES}			±20	V
t _{psc}	V _{CC} = 600 V; V _{GE} ≤ 20 V; T _j = 150 °C V _{CES} < 1200 V		10	µs
Inverse Diode				
I _F	T _j = 175 °C	T _c = 25 °C	83	A
		T _c = 70 °C	66	A
I _{FRM}	I _{CRM} = 3xI _{Cnom}		225	A
I _{FSM}	t _p = 10 ms; sin. T _j = 150 °C		429	A
Module				
I _{t(RMS)}			100	A
T _{vj}			-40...+175	°C
T _{stg}			-40...+125	°C
V _{isol}	AC, 1 min.		2500	V

Characteristics		$T_c = 25\text{ °C}$, unless otherwise specified			
Symbol	Conditions	min.	typ.	max.	Units
IGBT					
$V_{GE(th)}$	$V_{GE} = V_{CE}$, $I_C = \text{mA}$	5	5,8	6,5	V
I_{CES}	$V_{GE} = V$, $V_{CE} = V_{CES}$ $T_j = \text{°C}$				mA
V_{CE0}			$T_j = 25\text{ °C}$	1,1	V
			$T_j = 150\text{ °C}$	1	V
r_{CE}	$V_{GE} = 15\text{ V}$		$T_j = 25\text{ °C}$	10	mΩ
			$T_j = 150\text{ °C}$	17	mΩ
$V_{CE(sat)}$	$I_{Cnom} = 75\text{ A}$, $V_{GE} = 15\text{ V}$		$T_j = 25\text{ °C}_{chiplev.}$	1,85	V
			$T_j = 150\text{ °C}_{chiplev.}$	2,25	V
C_{ies}	$V_{CE} = \text{ , } V_{GE} = V$ $f = \text{MHz}$				nF
C_{oes}					nF
C_{res}					nF
R_{Gint}	$T_j = 25\text{ °C}$		0		Ω
$t_{d(on)}$	$R_{Gon} =$				ns
t_r					ns
E_{on}	$R_{Goff} =$			8,5	mJ
$t_{d(off)}$					ns
t_f					ns
E_{off}				5,5	mJ
$R_{th(j-s)}$	per IGBT		0,52		K/W

SKiiP 26AC12T4V1



MiniSKiiP[®]2

3-phase bridge inverter

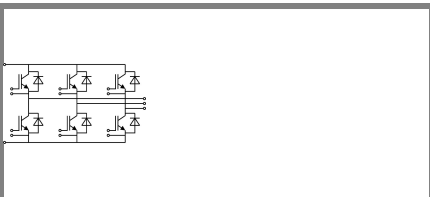
SKiiP 26AC12T4V1

Target Data

Features

- Trench 4 IGBT's
- Robust and soft freewheeling diodes in CAL technology
- Highly reliable spring contacts for electrical connections
- UL recognised file no. E63532

Typical Applications

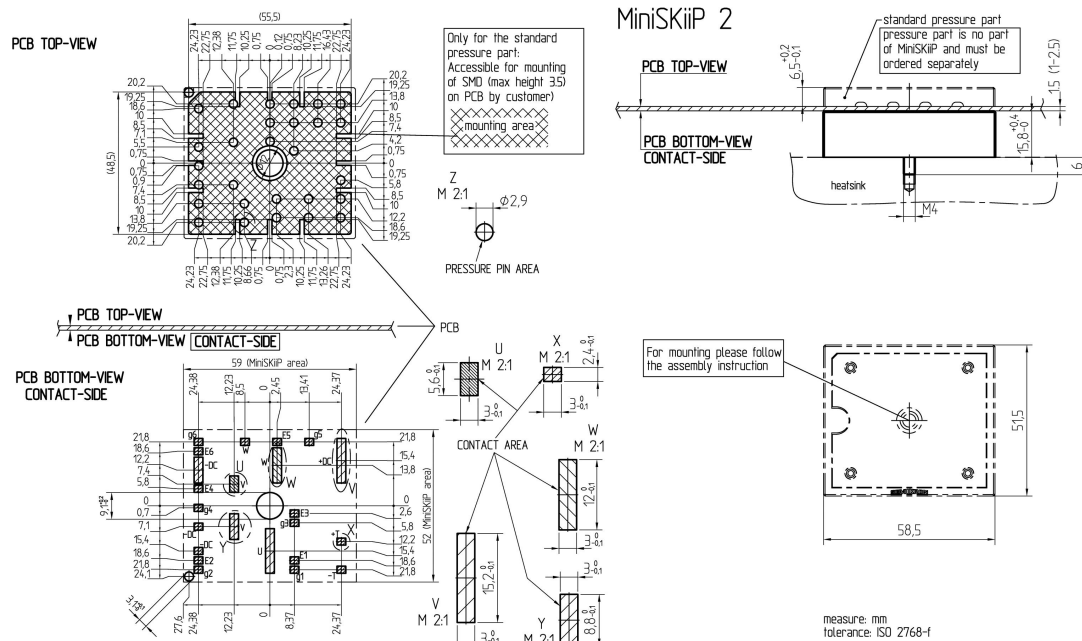


AC

Characteristics					
Symbol	Conditions	min.	typ.	max.	Units
Inverse Diode					
V _F = V _{EC}	I _{Fnom} = 75 A; V _{GE} = V	T _j = 25 °C _{chiplev.}	2,2	2,5	V
		T _j = 150 °C _{chiplev.}	2,1	2,45	V
V _{F0}		T _j = 25 °C	1,3	1,5	V
		T _j = 150 °C	0,9	1,1	V
r _F		T _j = 25 °C	12	13	mΩ
		T _j = 150 °C	15	18	mΩ
I _{RRM}	I _{Fnom} = A	T _j = °C			A
Q _{rr}	V _{GE} = ±15V				μC
E _{rr}		5,6			mJ
R _{th(j-s)}	per diode	0,74			K/W
M _s	to heat sink				Nm
M _t	to terminals	2	2,5		Nm
w		65			g
Temperature sensor					
R _{ts}	3%, Tr = 25°C	1000			Ω
R _{ts}	3%, Tr = 100°C	1670			Ω

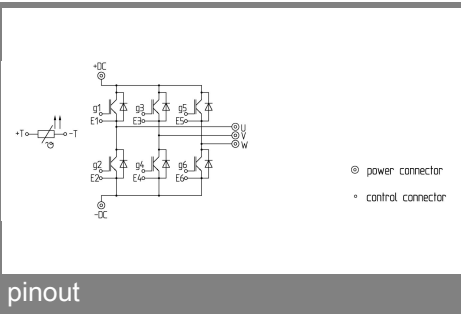
This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, Chapter IX.

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



These documents are Semikron property. Semikron reserves all
copyrights. All copying and transmitting of this information requires
written permission. For the case of industrial property rights,
Semikron reserves all rights.

case



pinout