

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: IKW30N65ET7XKSA1
Manufacturer: Infineon Technologies
Package: TO-247-3
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/infineon-technologies/ikw30n65et7xksa1.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

Contact Information

Email: info@antrexco.com

WhatsApp: +86-186-8066-5326

Website: <https://antrexco.com>

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Low loss Duopack: IGBT 7 with Trench and Fieldstop technology

Features

- $V_{CE} = 650\text{ V}$
- $I_C = 30\text{ A}$
- Very low $V_{CE,sat}$
- Low turn-off losses
- Short tail current
- Reduced EMI
- Very soft, fast recovery antiparallel diode
- Maximum junction temperature $T_{vjmax} = 175^\circ\text{C}$
- Qualified according to JEDEC for target applications
- Pb-free lead plating; RoHS compliant
- Complete product spectrum and PSpice Models: <http://www.infineon.com/igbt7/>

Potential applications

- Servo drives
- General purpose drives (GPD)
- Industrial power supplies
- Industrial UPS
- Industrial SMPS
- Energy generation
- Solar optimizer
- Solar string inverter

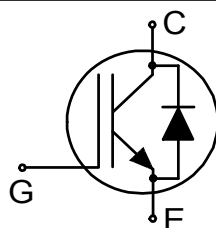
Product validation

- Qualified for industrial applications according to the relevant tests of JEDEC47/20/22

Description

Package pin definition:

- Pin C & backside - Collector
- Pin E - Emitter
- Pin G - Gate



Type	Package	Marking
IKW30N65ET7	PG-TO247-3	K30EET7



Table of contents

	Description	1
	Features	1
	Potential applications	1
	Product validation	1
	Table of contents	2
1	Package	3
2	IGBT	3
3	Diode	6
4	Characteristics diagrams	9
5	Package outlines	16
6	Testing conditions	17
	Revision history	18
	Disclaimer	19

1 Package

Table 1 Characteristic values

Parameter	Symbol	Note or test condition	Values			Unit
			Min.	Typ.	Max.	
Internal emitter inductance measured 5 mm (0.197 in.) from case	L_E			13		nH
Storage temperature	T_{stg}		-55		150	°C
Soldering temperature	T_{sold}	wave soldering 1.6 mm (0.063 in.) from case for 10 s			260	°C
Mounting torque	M	M3 screw, Maximum of mounting processes: 3			0.6	Nm
Thermal resistance, junction-ambient	$R_{th(j-a)}$				40	K/W
IGBT thermal resistance, junction-case	$R_{th(j-c)}$				0.8	K/W
Diode thermal resistance, junction-case	$R_{th(j-c)}$				1.1	K/W

2 IGBT

Table 2 Maximum rated values

Parameter	Symbol	Note or test condition		Values	Unit
Collector-emitter voltage	V_{CE}	$T_{vj} \geq 25\text{ °C}$		650	V
DC collector current, limited by T_{vjmax}	I_C		$T_c = 25\text{ °C}$	60	A
			$T_c = 100\text{ °C}$	39.1	
Pulsed collector current, t_p limited by T_{vjmax} ¹⁾	I_{Cpulse}			90	A
Turn-off safe operating area ²⁾		$V_{CE} \leq 650\text{ V}$, $t_p = 1\text{ }\mu\text{s}$, $T_{vj} \leq 175\text{ °C}$		90	A
Gate-emitter voltage	V_{GE}			± 20	V
Transient gate-emitter voltage	V_{GE}	$t_p \leq 10\text{ }\mu\text{s}$, $D < 0.01$		± 30	V
Short-circuit withstand time	t_{SC}	$V_{GE} = 15\text{ V}$, Allowed number of short circuits < 1000, Time between short circuits $\geq 1.0\text{ s}$	$V_{CC} \leq 330\text{ V}$, $T_{vj} = 100\text{ °C}$	5	μs
			$V_{CC} \leq 400\text{ V}$, $T_{vj} = 150\text{ °C}$	3	
Power dissipation	P_{tot}		$T_c = 25\text{ °C}$	188	W
			$T_c = 100\text{ °C}$	94	

1) Defined by design. Not subject to production test.

2) Clamped inductive load current test for each device, $I_C = 90\text{ A}$, $V_{CC} = 400\text{ V}$, $T_c = 25\text{ °C}$, $V_{GE} = 20\text{ V}$, $L = 80\text{ }\mu\text{H}$, $R_G = 10\text{ }\Omega$

Table 3 **Characteristic values**

Parameter	Symbol	Note or test condition		Values			Unit
				Min.	Typ.	Max.	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 30\text{ A}$, $V_{GE} = 15\text{ V}$	$T_{vj} = 25\text{ °C}$		1.35	1.65	V
			$T_{vj} = 125\text{ °C}$		1.5		
			$T_{vj} = 175\text{ °C}$		1.6		
Gate-emitter threshold voltage	V_{GETh}	$I_C = 0.3\text{ mA}$, $V_{CE} = V_{GE}$		4.3	5	5.7	V
Zero gate-voltage collector current	I_{CES}	$V_{CE} = 650\text{ V}$, $V_{GE} = 0\text{ V}$	$T_{vj} = 25\text{ °C}$			40	μA
			$T_{vj} = 175\text{ °C}$		800		
Gate-emitter leakage current	I_{GES}	$V_{CE} = 0\text{ V}$, $V_{GE} = 20\text{ V}$				100	nA
Transconductance	g_{fs}	$I_C = 30\text{ A}$, $V_{CE} = 20\text{ V}$			15		S
Short-circuit collector current	I_{SC}	$V_{CC} \leq 400\text{ V}$, $V_{GE} = 15\text{ V}$, $t_{SC} \leq 3\text{ }\mu\text{s}$, Allowed number of short circuits < 1000 , Time between short circuits $\geq 1.0\text{ s}$, $T_{vj} = 150\text{ °C}$			160		A
Input capacitance	C_{ies}	$V_{CE} = 25\text{ V}$, $V_{GE} = 0\text{ V}$, $f = 1000\text{ kHz}$			1900		pF
Output capacitance	C_{oes}	$V_{CE} = 25\text{ V}$, $V_{GE} = 0\text{ V}$, $f = 1000\text{ kHz}$			62		pF
Reverse transfer capacitance	C_{res}	$V_{CE} = 25\text{ V}$, $V_{GE} = 0\text{ V}$, $f = 1000\text{ kHz}$			20		pF
Gate charge	Q_G	$I_C = 30\text{ A}$, $V_{GE} = 15\text{ V}$, $V_{CC} = 520\text{ V}$			180		nC
Turn-on delay time	$t_{d(on)}$	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\text{ }\Omega$, $R_{G(off)} = 10\text{ }\Omega$, $L_\sigma = 32\text{ nH}$, $C_\sigma = 30\text{ pF}$	$T_{vj} = 25\text{ °C}$, $I_C = 30\text{ A}$		20		ns
			$T_{vj} = 25\text{ °C}$, $I_C = 15\text{ A}$		19		
			$T_{vj} = 175\text{ °C}$, $I_C = 30\text{ A}$		22		
			$T_{vj} = 175\text{ °C}$, $I_C = 15\text{ A}$		20		
Rise time (inductive load)	t_r	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\text{ }\Omega$, $R_{G(off)} = 10\text{ }\Omega$, $L_\sigma = 32\text{ nH}$, $C_\sigma = 30\text{ pF}$	$T_{vj} = 25\text{ °C}$, $I_C = 30\text{ A}$		12		ns
			$T_{vj} = 25\text{ °C}$, $I_C = 15\text{ A}$		7		
			$T_{vj} = 175\text{ °C}$, $I_C = 30\text{ A}$		15		
			$T_{vj} = 175\text{ °C}$, $I_C = 15\text{ A}$		9		

(table continues...)

Table 3 (continued) **Characteristic values**

Parameter	Symbol	Note or test condition	Values			Unit
			Min.	Typ.	Max.	
Turn-off delay time	$t_{d(off)}$	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\ \Omega$, $R_{G(off)} = 10\ \Omega$, $L_{\sigma} = 32\text{ nH}$, $C_{\sigma} = 30\text{ pF}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	245		ns
			$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	265		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	300		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	355		
Fall time (inductive load)	t_f	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\ \Omega$, $R_{G(off)} = 10\ \Omega$, $L_{\sigma} = 32\text{ nH}$, $C_{\sigma} = 30\text{ pF}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	11		ns
			$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	9		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	45		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	53		
Turn-on energy	E_{on}	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\ \Omega$, $R_{G(off)} = 10\ \Omega$, $L_{\sigma} = 32\text{ nH}$, $C_{\sigma} = 30\text{ pF}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	0.59		mJ
			$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.26		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	0.96		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.49		
Turn-off energy	E_{off}	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\ \Omega$, $R_{G(off)} = 10\ \Omega$, $L_{\sigma} = 32\text{ nH}$, $C_{\sigma} = 30\text{ pF}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	0.5		mJ
			$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.22		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	0.9		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.47		

(table continues...)

Table 3 (continued) **Characteristic values**

Parameter	Symbol	Note or test condition	Values			Unit
			Min.	Typ.	Max.	
Total switching energy	E_{ts}	$V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_{G(on)} = 10\ \Omega$, $R_{G(off)} = 10\ \Omega$, $L_{\sigma} = 32\text{ nH}$, $C_{\sigma} = 30\text{ pF}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	1.09		mJ
			$T_{vj} = 25\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.48		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 30\text{ A}$	1.86		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$, $I_C = 15\text{ A}$	0.96		
Operating junction temperature	T_{vj}		-40		175	$^{\circ}\text{C}$

3 Diode

Table 4 **Maximum rated values**

Parameter	Symbol	Note or test condition		Values	Unit
Repetitive peak reverse voltage	V_{RRM}	$T_{vj} \geq 25\text{ }^{\circ}\text{C}$		650	V
Diode forward current, limited by T_{vjmax}	I_F	limited by bondwire	$T_C = 25\text{ }^{\circ}\text{C}$	40	A
			$T_C = 100\text{ }^{\circ}\text{C}$	34.8	
Diode pulsed current, t_p limited by T_{vjmax} ¹⁾	I_{Fpulse}			90	A

1) Defined by design. Not subject to production test.

Table 5 **Characteristic values**

Parameter	Symbol	Note or test condition	Values			Unit
			Min.	Typ.	Max.	
Diode forward voltage	V_F	$I_F = 30\text{ A}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$	1.65	2	V
			$T_{vj} = 125\text{ }^{\circ}\text{C}$	1.6		
			$T_{vj} = 175\text{ }^{\circ}\text{C}$	1.55		

(table continues...)

Table 5 (continued) Characteristic values

Parameter	Symbol	Note or test condition		Values			Unit
				Min.	Typ.	Max.	
Diode reverse recovery time	t_{rr}	$V_R = 400 \text{ V}$	$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1700 \text{ A}/\mu\text{s}$		80		ns
			$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1830 \text{ A}/\mu\text{s}$		55		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1475 \text{ A}/\mu\text{s}$		140		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1580 \text{ A}/\mu\text{s}$		105		
Diode reverse recovery charge	Q_{rr}	$V_R = 400 \text{ V}$	$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1700 \text{ A}/\mu\text{s}$		0.68		μC
			$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1830 \text{ A}/\mu\text{s}$		0.48		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1475 \text{ A}/\mu\text{s}$		1.9		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1580 \text{ A}/\mu\text{s}$		1.36		
Diode peak reverse recovery current	I_{rrm}	$V_R = 400 \text{ V}$	$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1700 \text{ A}/\mu\text{s}$		18.4		A
			$T_{vj} = 25 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1830 \text{ A}/\mu\text{s}$		20		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1475 \text{ A}/\mu\text{s}$		25		
			$T_{vj} = 175 \text{ }^{\circ}\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1580 \text{ A}/\mu\text{s}$		25.8		

(table continues...)

Table 5 (continued) Characteristic values

Parameter	Symbol	Note or test condition		Values			Unit
				Min.	Typ.	Max.	
Diode peak rate of fall of reverse recovery current	di_{rr}/dt	$V_R = 400 \text{ V}$	$T_{vj} = 25 \text{ }^\circ\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1700 \text{ A}/\mu\text{s}$		270		$\text{A}/\mu\text{s}$
			$T_{vj} = 25 \text{ }^\circ\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1830 \text{ A}/\mu\text{s}$		440		
			$T_{vj} = 175 \text{ }^\circ\text{C}$, $I_F = 30 \text{ A}$, $-di_F/dt = 1475 \text{ A}/\mu\text{s}$		205		
			$T_{vj} = 175 \text{ }^\circ\text{C}$, $I_F = 15 \text{ A}$, $-di_F/dt = 1580 \text{ A}/\mu\text{s}$		295		
Operating junction temperature	T_{vj}			-40		175	$^\circ\text{C}$

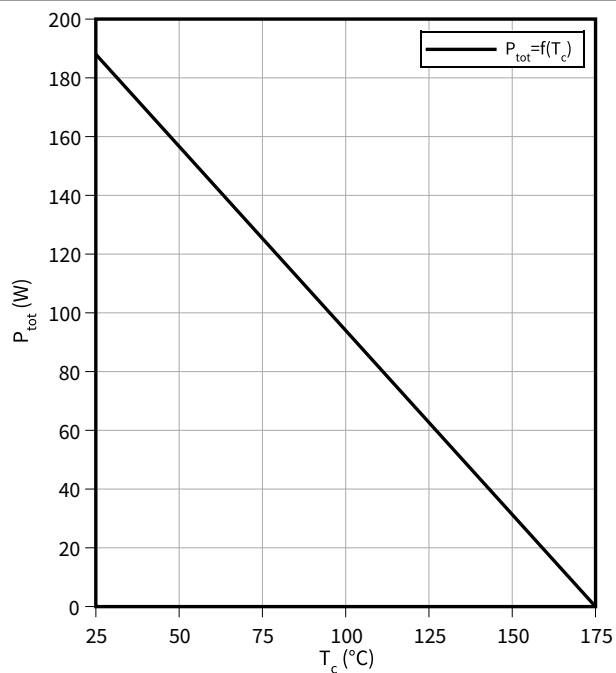
Note: *Maximum rated values: For optimum lifetime and reliability, Infineon recommends operating conditions that do not exceed 80% of the maximum ratings stated in this datasheet.*
Electrical Characteristic, at $T_{vj} = 25^\circ\text{C}$, unless otherwise specified.
Dynamic test circuit, L_σ , C_σ from Fig. E. Energy losses include “tail” and diode reverse recovery.

4 Characteristics diagrams

Power dissipation as a function of case temperature

$$P_{\text{tot}} = f(T_c)$$

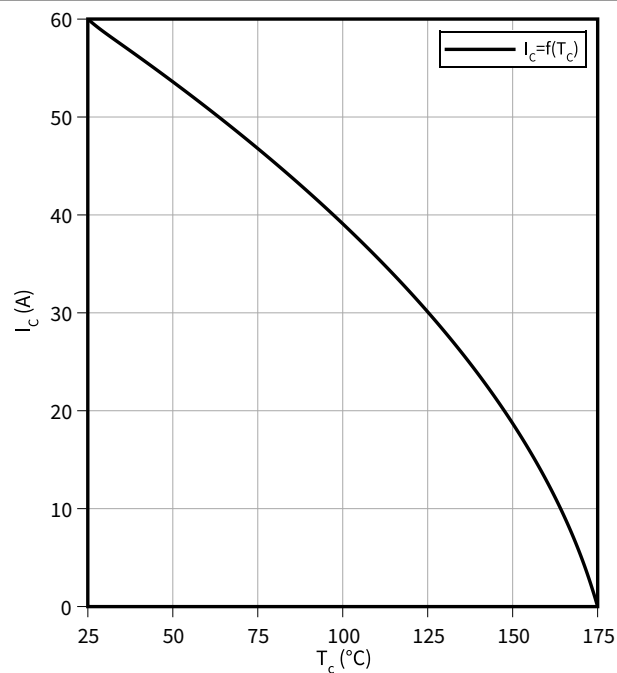
$$T_{vj} \leq 175^\circ\text{C}$$



Collector current as a function of case temperature

$$I_c = f(T_c)$$

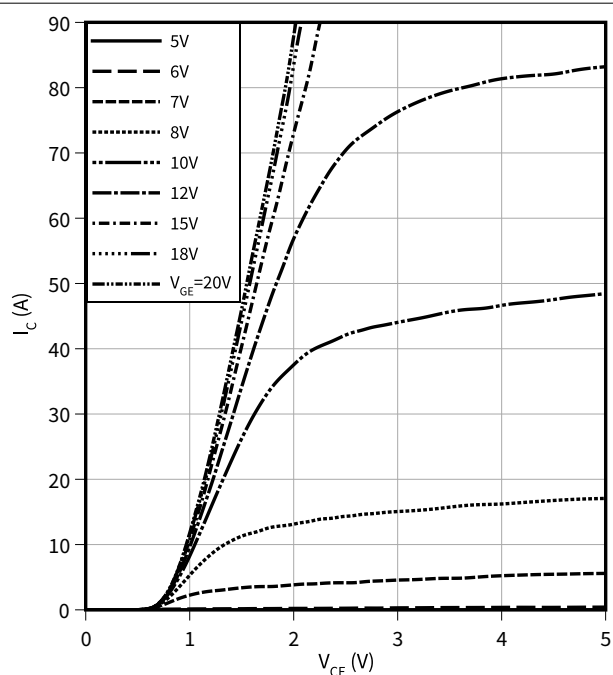
$$V_{GE} \geq 15\text{ V}, T_{vj} \leq 175^\circ\text{C}$$



Typical output characteristic

$$I_c = f(V_{CE})$$

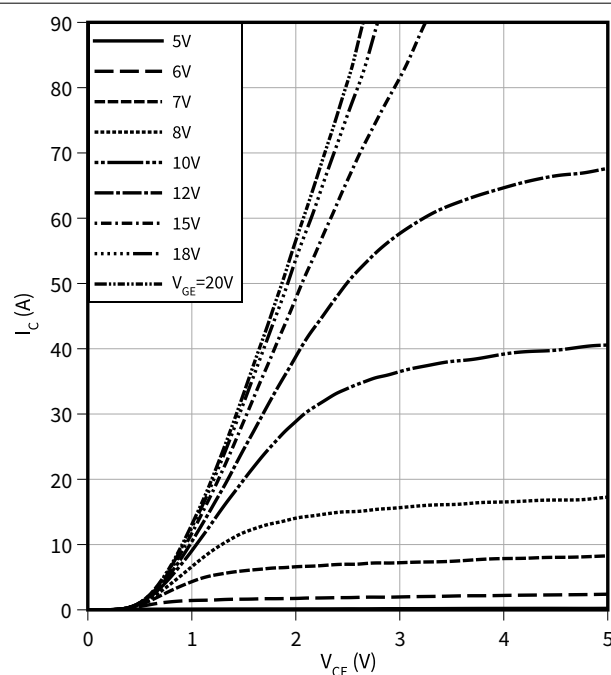
$$T_{vj} = 25^\circ\text{C}$$



Typical output characteristic

$$I_c = f(V_{CE})$$

$$T_{vj} = 175^\circ\text{C}$$

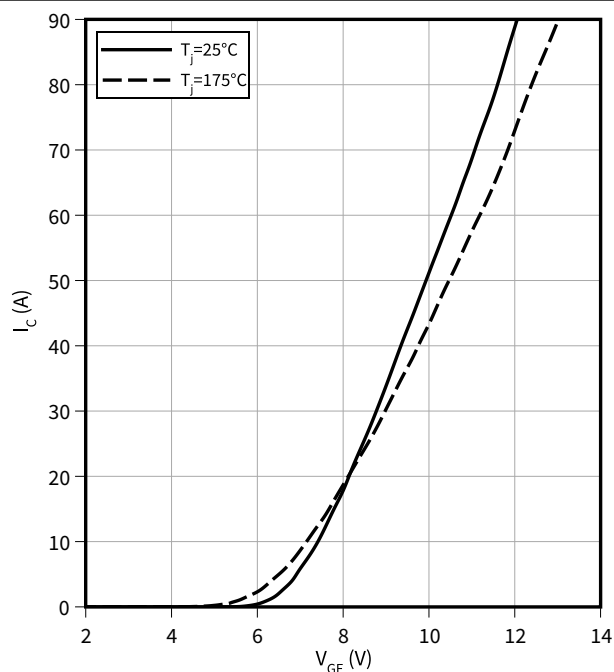


4 Characteristics diagrams

Typical transfer characteristic

$$I_C = f(V_{GE})$$

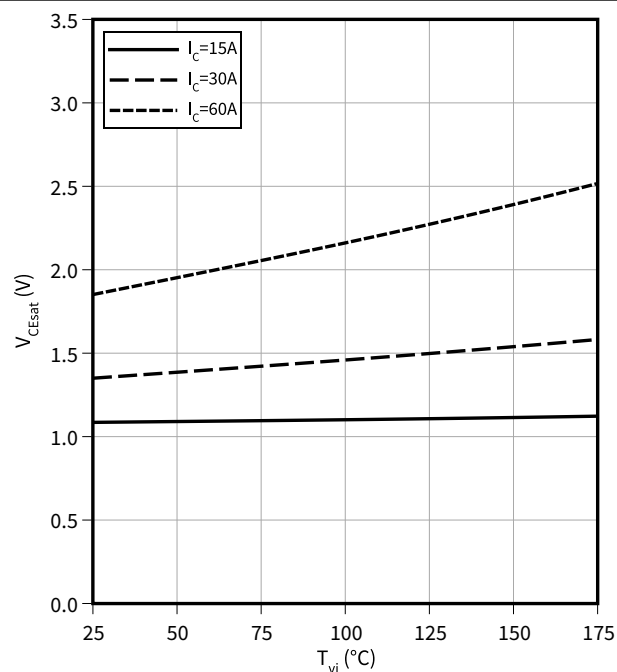
$$V_{CE} = 20 \text{ V}$$



Typical collector-emitter saturation voltage as a function of junction temperature

$$V_{CEsat} = f(T_{vj})$$

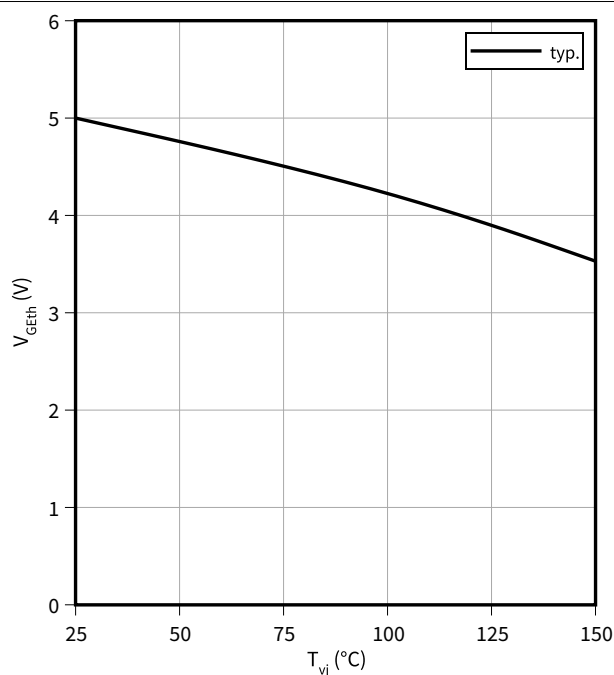
$$V_{GE} = 15 \text{ V}$$



Gate-emitter threshold voltage as a function of junction temperature

$$V_{GEth} = f(T_{vj})$$

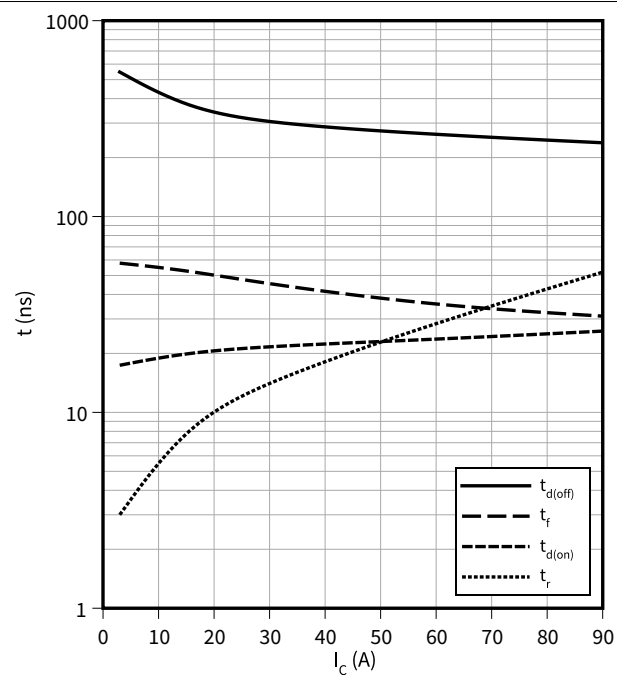
$$I_C = 0.3 \text{ mA}$$



Typical switching times as a function of collector current

$$t = f(I_C)$$

$$V_{CC} = 400 \text{ V}, T_{vj} = 175^\circ\text{C}, V_{GE} = 0/15 \text{ V}, R_G = 10 \Omega$$

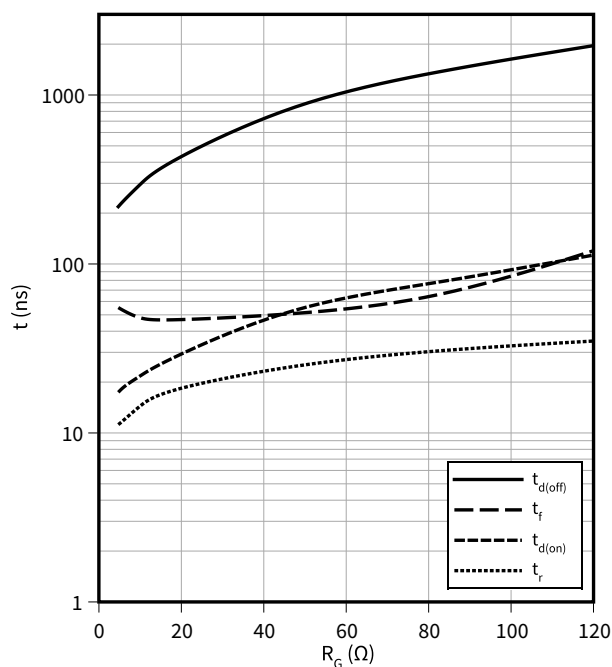


4 Characteristics diagrams

Typical switching times as a function of gate resistor

$$t = f(R_G)$$

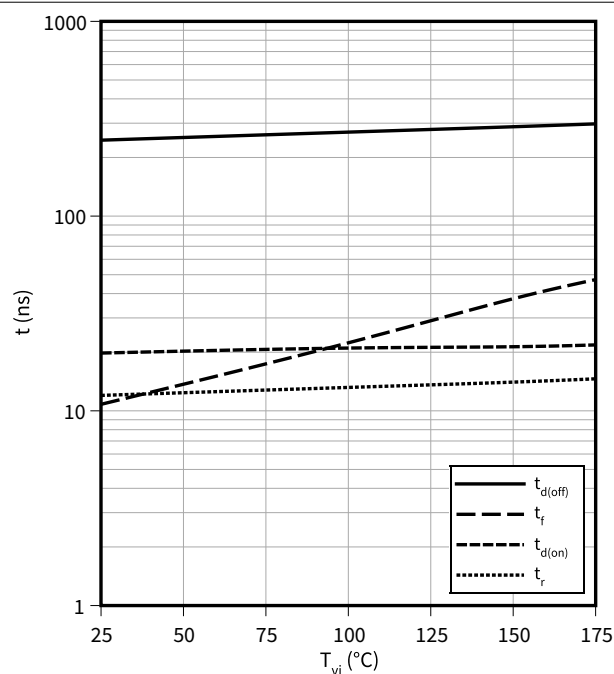
$I_C = 30 \text{ A}$, $V_{CC} = 400 \text{ V}$, $T_{vj} = 175 \text{ }^\circ\text{C}$, $V_{GE} = 0/15 \text{ V}$



Typical switching times as a function of junction temperature

$$t = f(T_{vj})$$

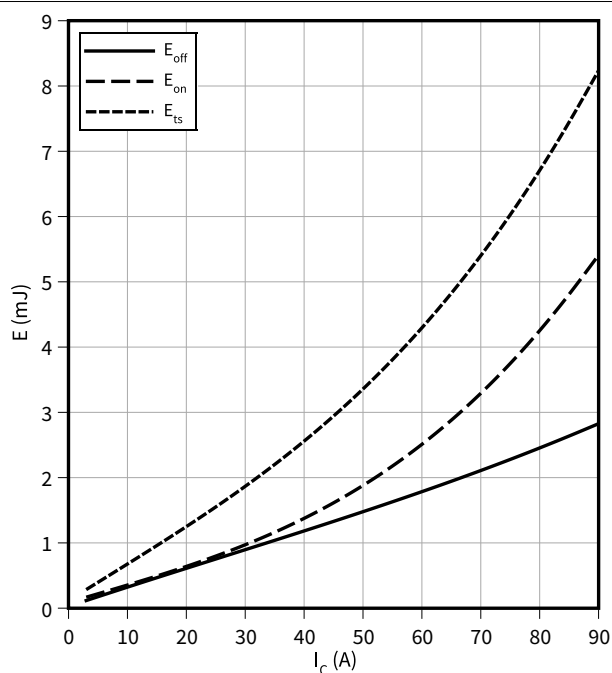
$I_C = 30 \text{ A}$, $V_{CC} = 400 \text{ V}$, $V_{GE} = 0/15 \text{ V}$, $R_G = 10 \text{ } \Omega$



Typical switching energy losses as a function of collector current

$$E = f(I_C)$$

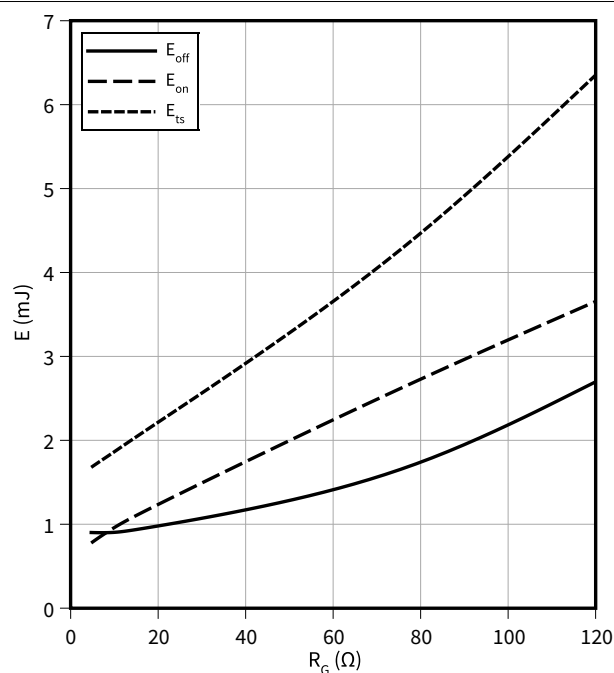
$V_{CC} = 400 \text{ V}$, $T_{vj} = 175 \text{ }^\circ\text{C}$, $V_{GE} = 0/15 \text{ V}$, $R_G = 10 \text{ } \Omega$



Typical switching energy losses as a function of gate resistor

$$E = f(R_G)$$

$I_C = 30 \text{ A}$, $V_{CC} = 400 \text{ V}$, $T_{vj} = 175 \text{ }^\circ\text{C}$, $V_{GE} = 0/15 \text{ V}$

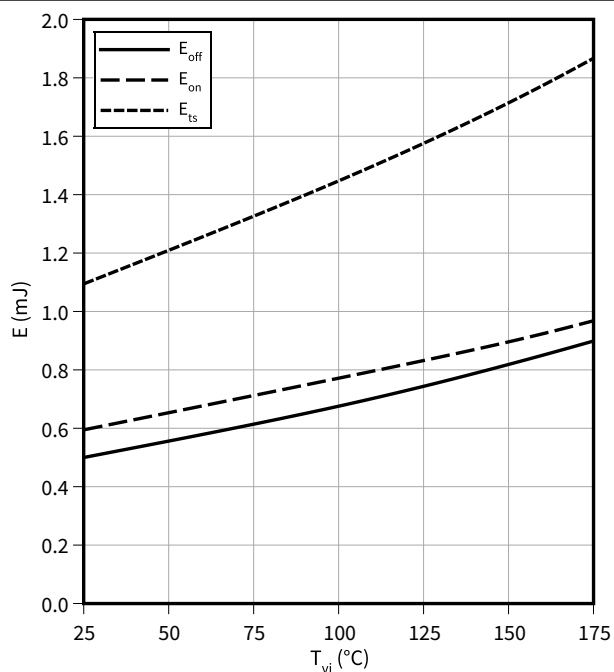


4 Characteristics diagrams

Typical switching energy losses as a function of junction temperature

$$E = f(T_{vj})$$

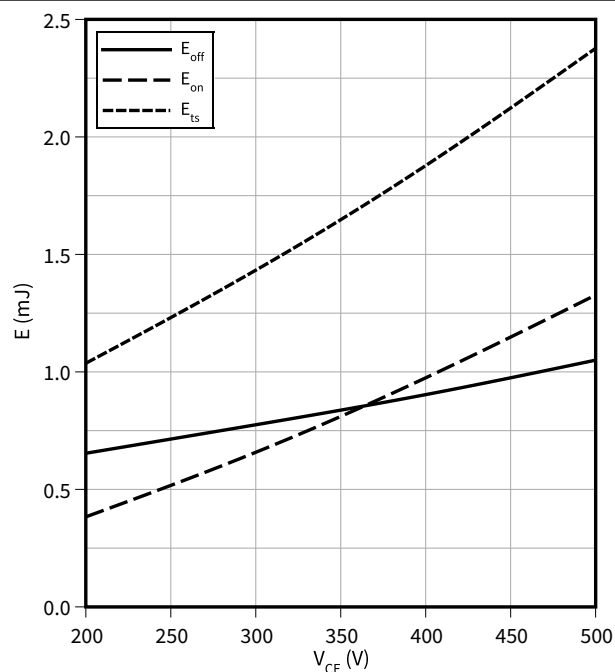
$I_C = 30\text{ A}$, $V_{CC} = 400\text{ V}$, $V_{GE} = 0/15\text{ V}$, $R_G = 10\ \Omega$



Typical switching energy losses as a function of collector emitter voltage

$$E = f(V_{CE})$$

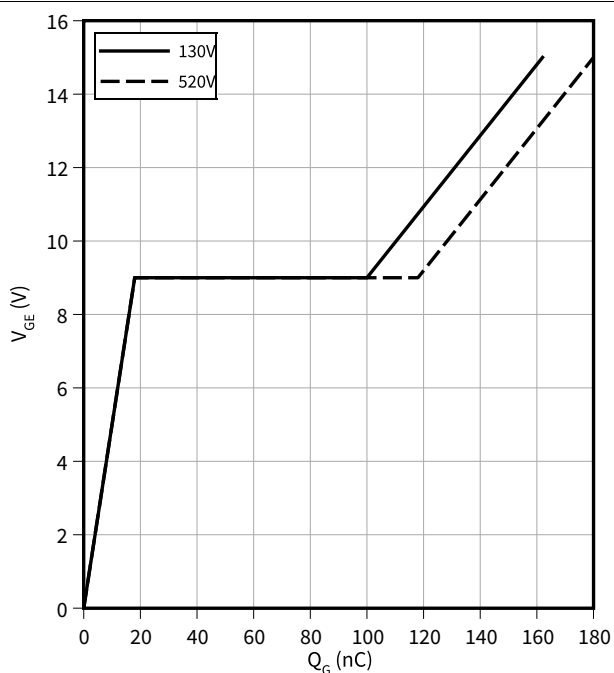
$I_C = 30\text{ A}$, $T_{vj} = 175\text{ °C}$, $V_{GE} = 0/15\text{ V}$, $R_G = 10\ \Omega$



Typical gate charge

$$V_{GE} = f(Q_G)$$

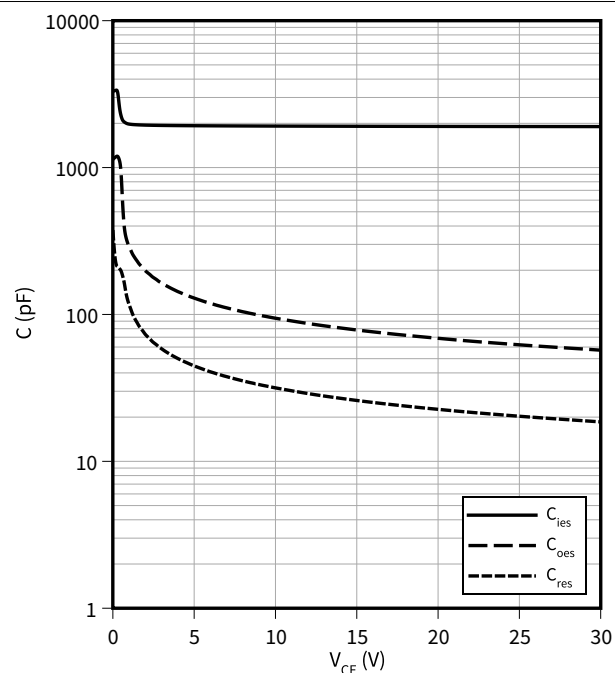
$I_C = 30\text{ A}$



Typical capacitance as a function of collector-emitter voltage

$$C = f(V_{CE})$$

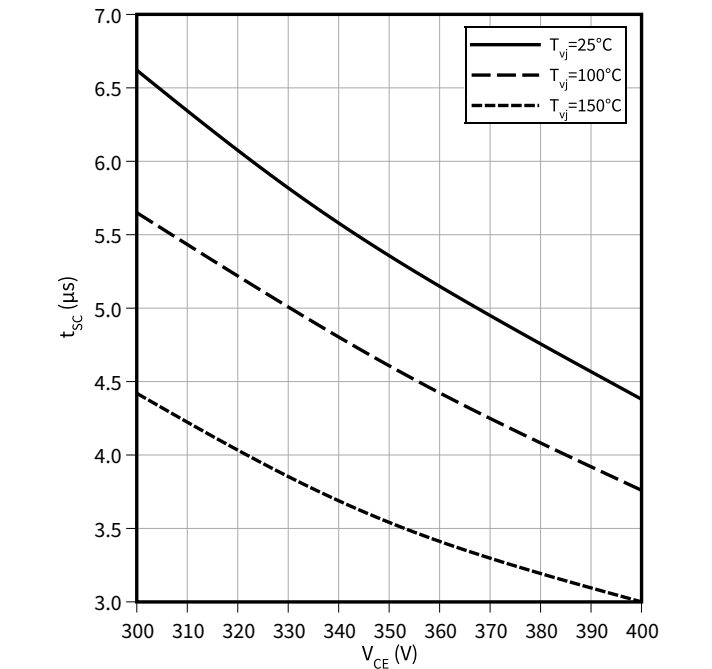
$f = 1000\text{ kHz}$, $V_{GE} = 0\text{ V}$



4 Characteristics diagrams

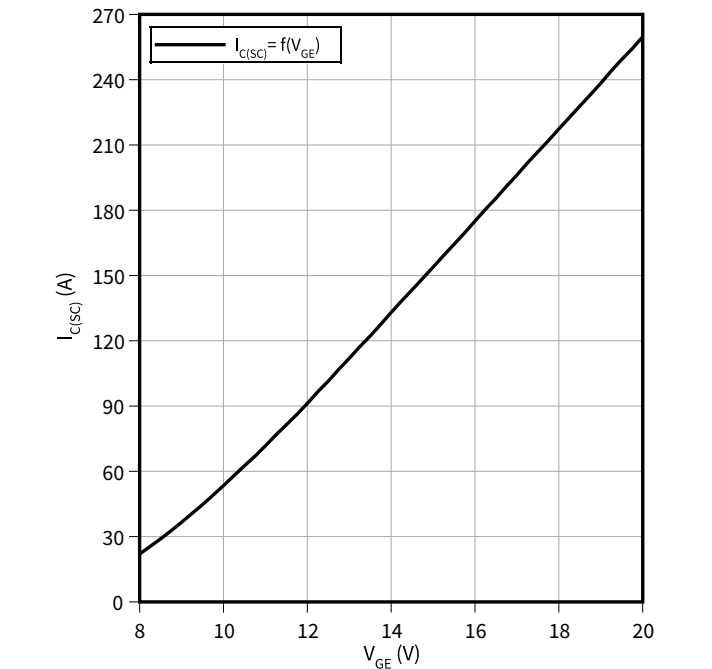
Typical short circuit safe operating range as a function of collector-emitter voltage

$t_{SC} = f(V_{CE})$



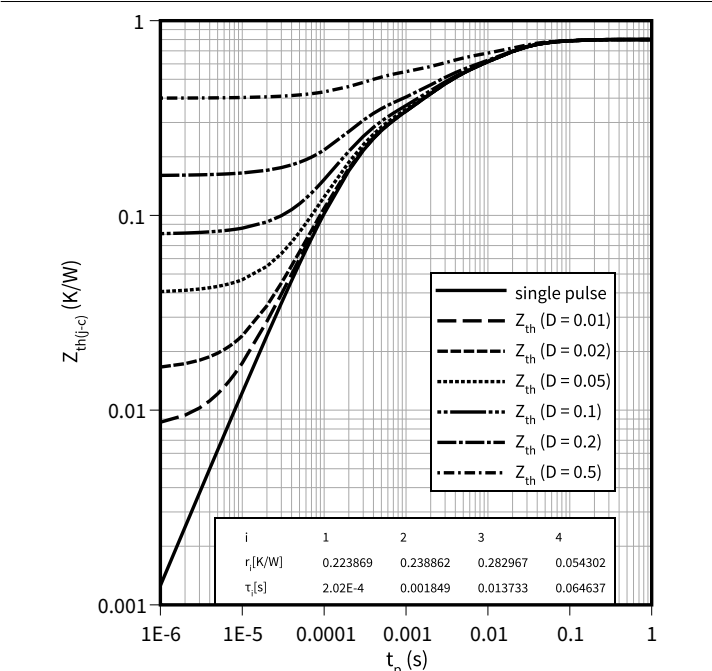
Typical short circuit collector current as a function of gate-emitter voltage

$I_{C(SC)} = f(V_{GE})$
 $V_{CE} \leq 400\text{ V}, T_{vj} = 150^{\circ}\text{C}$



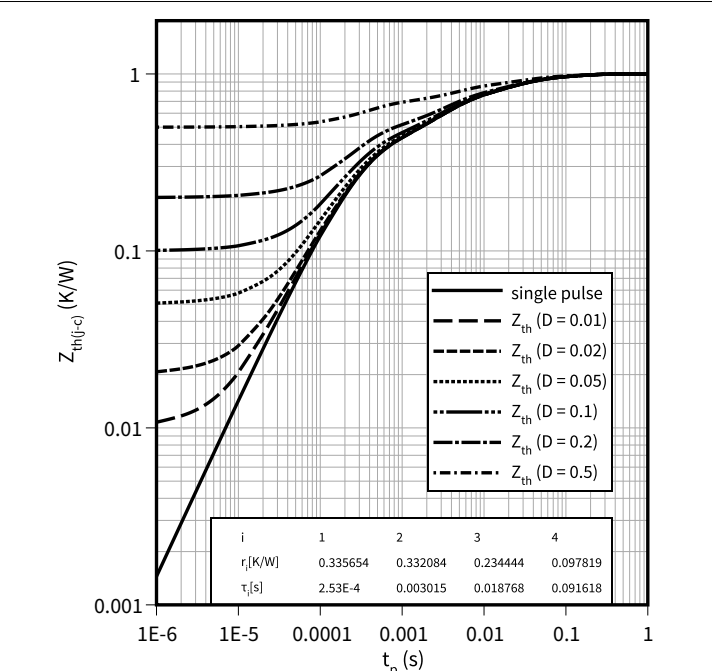
IGBT transient thermal impedance as a function of pulse width

$Z_{th(j-c)} = f(t_p)$
 $D = t_p/T$



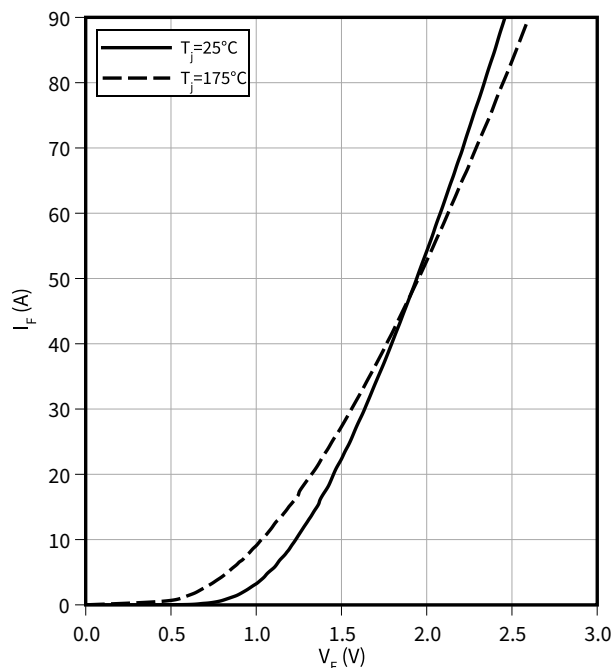
Diode transient thermal impedance as a function of pulse width

$Z_{th(j-c)} = f(t_p)$
 $D = t_p/T$



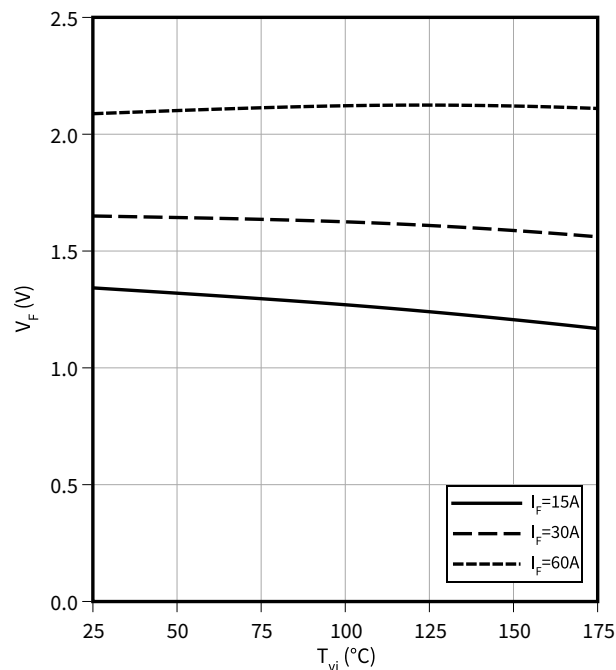
Typical diode forward current as a function of forward voltage

$$I_F = f(V_F)$$



Typical diode forward voltage as a function of junction temperature

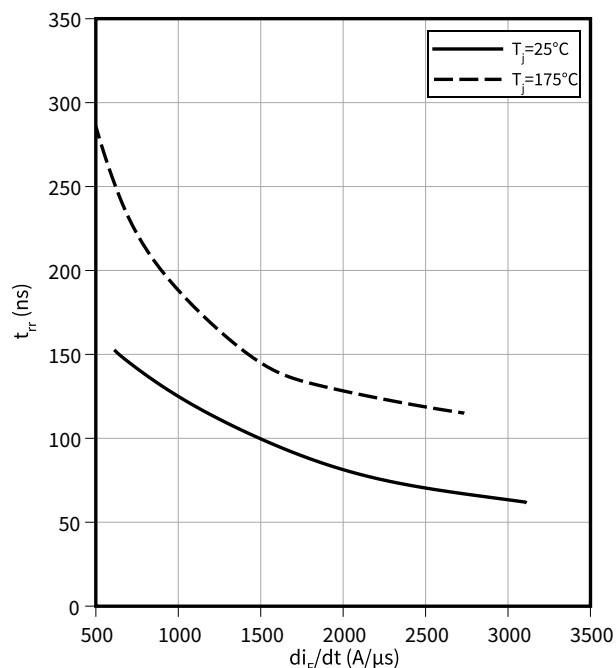
$$V_F = f(T_{vj})$$



Typical reverse recovery time as a function of diode current slope

$$t_{rr} = f(di_F/dt)$$

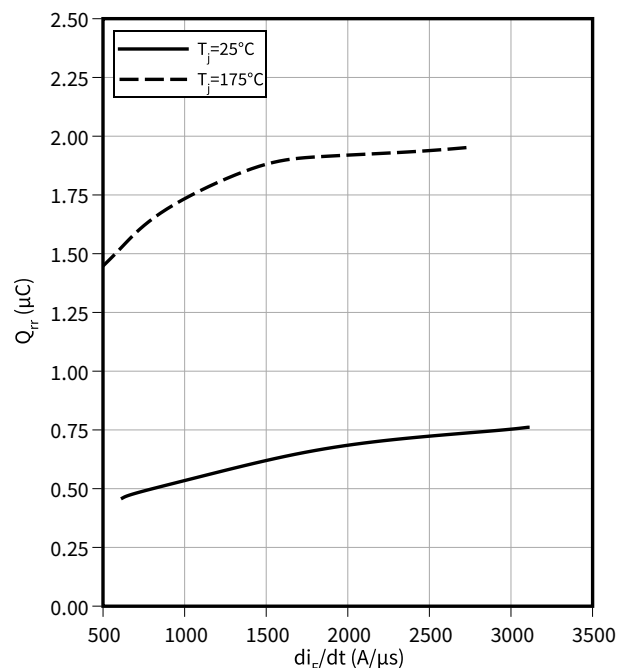
$$V_R = 400 \text{ V}, I_F = 30 \text{ A}$$



Typical reverse recovery charge as a function of diode current slope

$$Q_{rr} = f(di_F/dt)$$

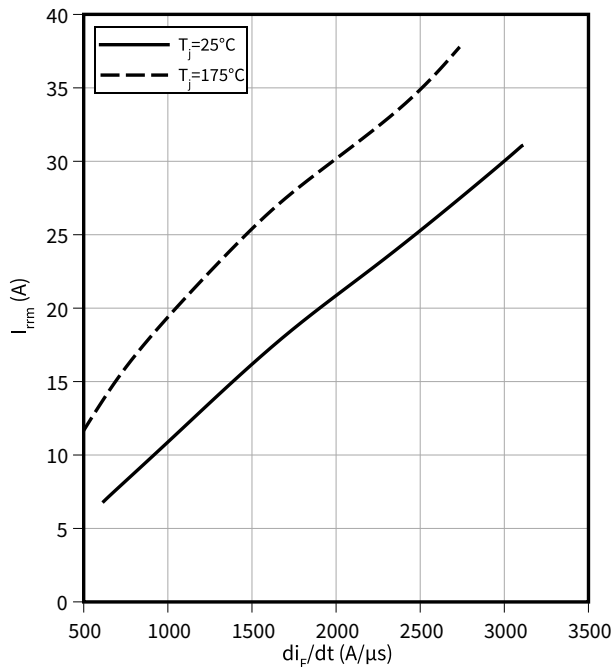
$$V_R = 400 \text{ V}, I_F = 30 \text{ A}$$



4 Characteristics diagrams

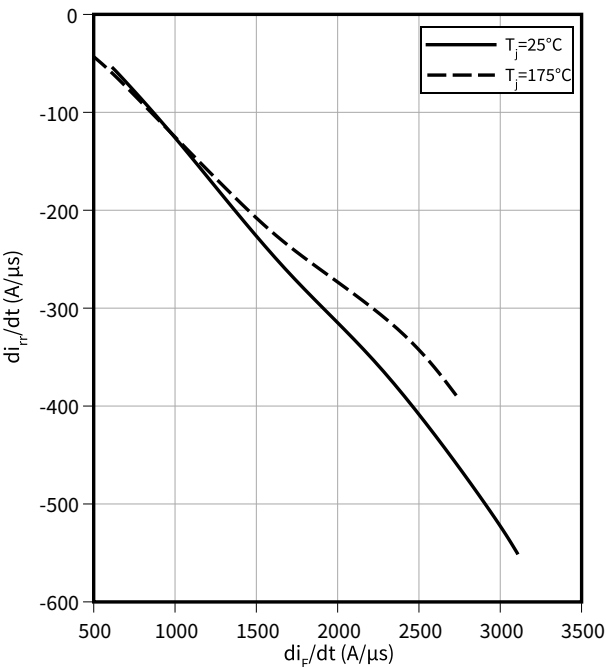
Typical reverse recovery current as a function of diode current slope

$I_{rrm} = f(di_F/dt)$
 $V_R = 400\text{ V}, I_F = 30\text{ A}$



Typical diode peak rate of fall of reverse recovery current as a function of diode current slope

$di_{rr}/dt = f(di_F/dt)$
 $V_R = 400\text{ V}, I_F = 30\text{ A}$



5 Package outlines

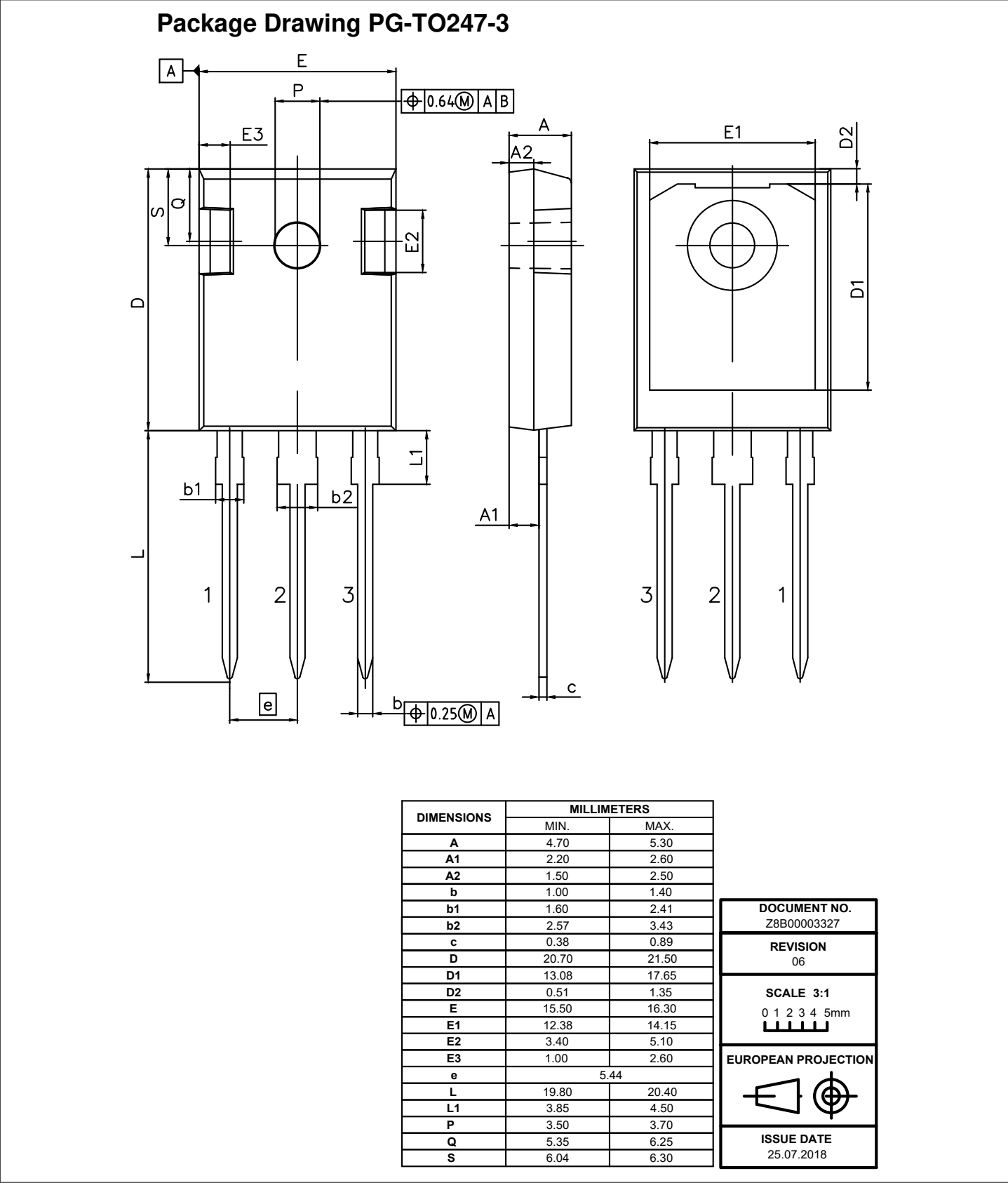


Figure 1

6 Testing conditions

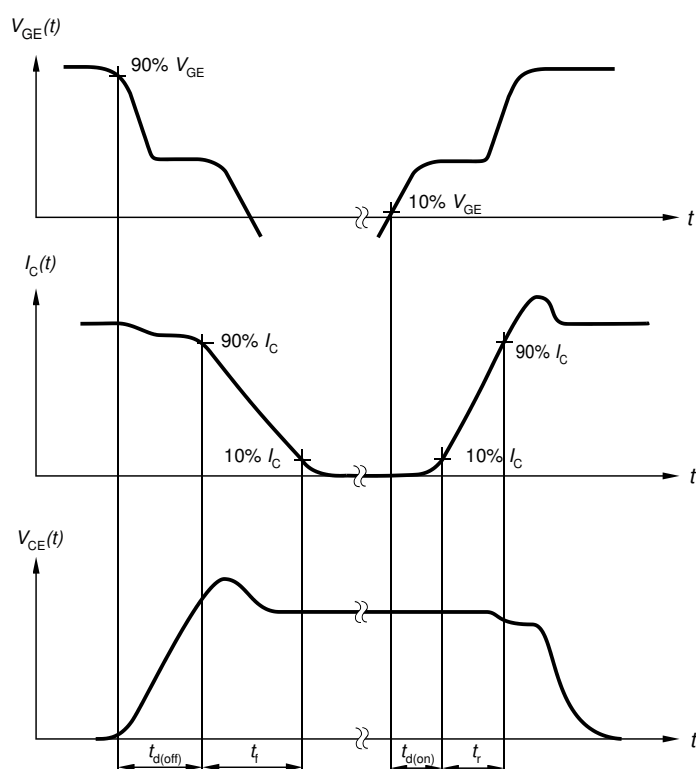


Figure A. Definition of switching times

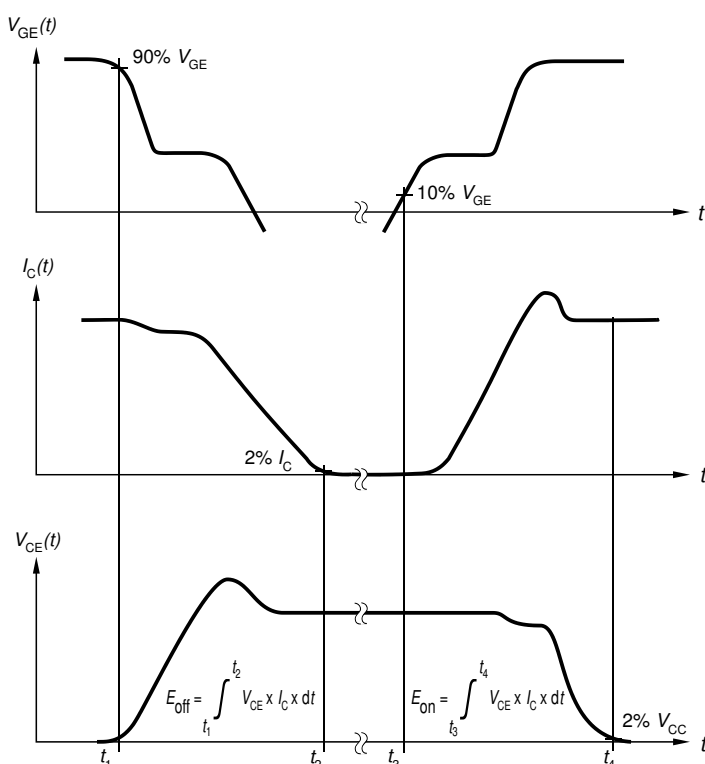


Figure B. Definition of switching losses

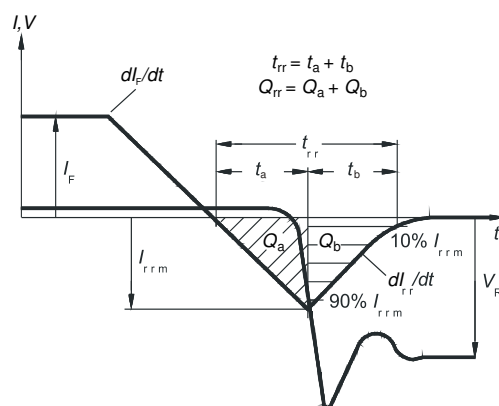


Figure C. Definition of diode switching characteristics

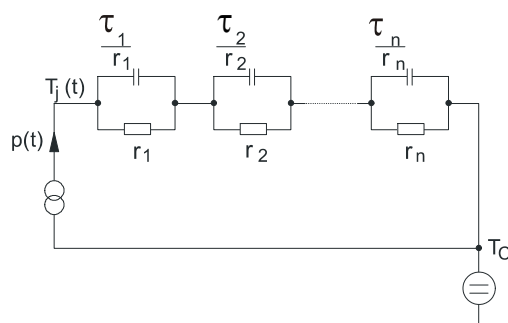


Figure D. Thermal equivalent circuit

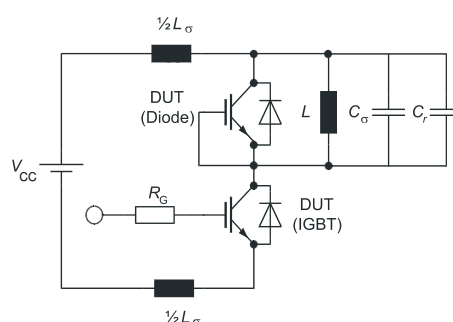


Figure E. **Dynamic test circuit**
 Parasitic inductance L_{σ} ,
 parasitic capacitor C_{σ} ,
 relief capacitor C_r ,
 (only for ZVT switching)

Revision history

Document revision	Date of release	Description of changes
V1.1	2020-04-20	Preliminary data sheet
V2.1	2020-05-12	Final data sheet
n/a	2020-11-30	Datasheet migrated to a new system with a new layout and new revision number schema: target or preliminary datasheet = 0.xy; final datasheet = 1.xy
1.00	2021-06-29	Change of potential applications and new diagram added (t_{SC} as function of V_{CE})
1.10	2023-01-26	Feature list corrections Editorial changes

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Edition 2023-01-26

Published by

Infineon Technologies AG
81726 Munich, Germany

© 2023 Infineon Technologies AG
All Rights Reserved.

Do you have a question about any aspect of this document?

Email: erratum@infineon.com

Document reference
IFX-AAL381-004

Important notice

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenhheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

Please note that this product is not qualified according to the AEC Q100 or AEC Q101 documents of the Automotive Electronics Council.

Warnings

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.