

**Features** 

Package TO252

- Built-in zener Di between collector gate VCL typ. 400V
- · Built-in gate protection diode
- · SMD PKG TO252
- Low saturated voltage

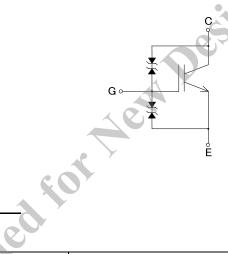
VCE(sat) Max. 1.4V (at VGE=10V, IC=5A)



**Applications** 

**Equivalent circuit** 

Ignitor



## **Absolute maximum ratings**

(Ta=25°C)

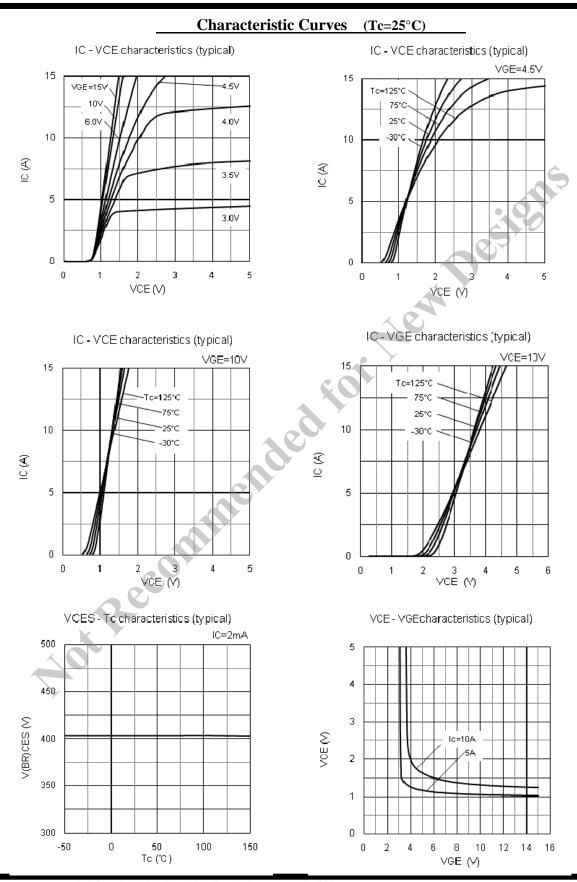
		(	1a-25 C)
Characteristic	Symbol	Rating	Unit
Collector to Emitter Voltage	VCES	CLAMPED	V
Gate to Emitter Voltage	VGE	±20	V
Continuous Collector Current	IC(DC)	15	A
Maximum Allowable Power Dissipation	PC	55 (Tc=25°C)	W
Operating Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	°C



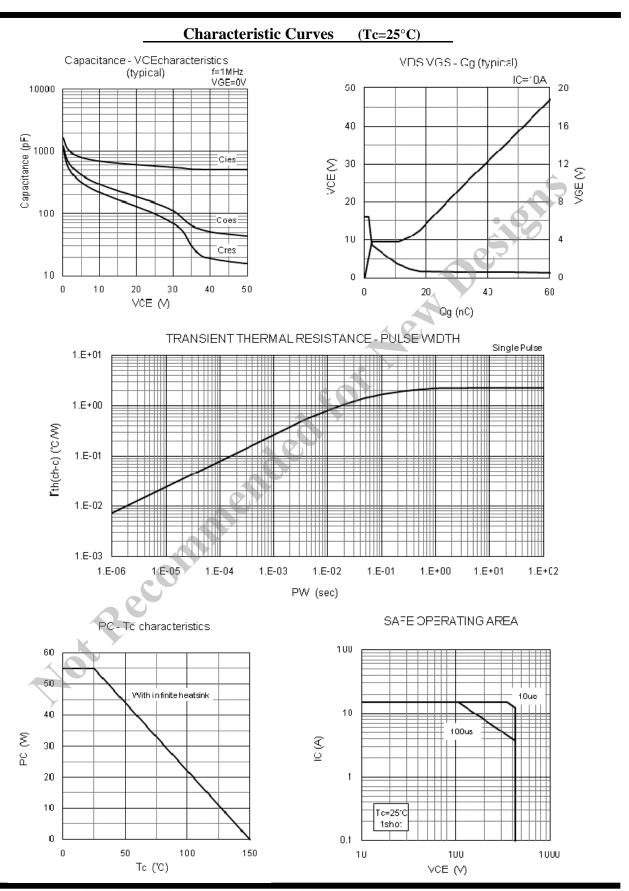
## **Electrical characteristics**

(Ta=25°C)

at	Symbol			23 ()		
Characteristic		Test Conditions	MIN.	TYP.	MAX.	Unit
Collector to Emitter Breakdown Voltage	V(BR)CES	IC= 2mA, VGE=0V	375	400	425	V
Gate to Emitter Breakdown Voltage	V(BR)GES	IG=±100μA, VCE=0V	±20		05	V
Emitter to Collector Breakdown Voltage	V(BR)ECS	IEC=10mA, VGE=0V	20		Ö	V
Collector to Emitter Leakage Current	ICES	VCE=300V, VGE=0V			100	μΑ
Gate to Emitter Leakage Curren	IGES	VGE=±20V,VCE=0V			±100	μΑ
Gate Threshold Voltage	VGE(th)	VCE=10V, IC=1mA	1.4	1.8	2.2	V
Collector to Emitter Saturation Voltage	VCE(sat)	VGE=4.5V, IC= 5A		1.2	1.5	V
Collector to Emitter Saturation Voltage	VCE(sat)	VGE=10V, IC= 5A		1.1	1.4	V
Collector to Emitter Saturation Voltage	VCE(sat)	VGE=10V, IC= 10A		1.4	1.7	V
Input Capacitance	Cies			700		
Output Capacitance	Coes	VCE=10V f=1.0MHz VGE=0V		300		pF
Reverse Transfer Capacitance	Cres			220		
Self Clamped Inductive Switching Energy	Es/B	L=5mH, Rg=200Ω	150			mJ



The information included herein is believed to be accurate and reliable. However, SANKEN ELECTRIC CO., LTD assumes no responsibility for its use; nor for any infringements of patents or other rights of third parties that may result from its use.



The information included herein is believed to be accurate and reliable. However, SANKEN ELECTRIC CO., LTD assumes no responsibility for its use; nor for any infringements of patents or other rights of third parties that may result from its use.



