



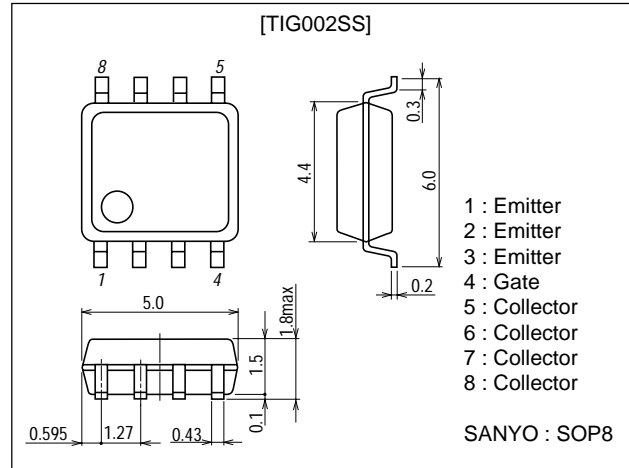
Light-Controlling Strobe Applications

Features

- Low-saturation voltage.
- 4V drive.
- Enhancement type.

Package Dimensions

unit : mm
2203



Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Emitter Voltage	V_{CES}		400	V
Gate-to-Emitter Voltage (DC)	V_{GES}		± 6	V
Gate-to-Emitter Voltage (Pulse)	V_{GES}		± 8	V
Collector Current (Pulse)	I_{CP}	$PW \leq 500\mu\text{s}$, duty cycle $\leq 0.5\%$	150	A
Channel Temperature	T_{ch}		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

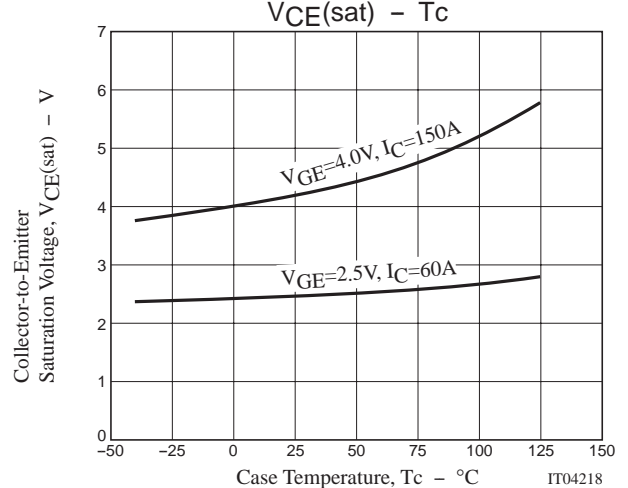
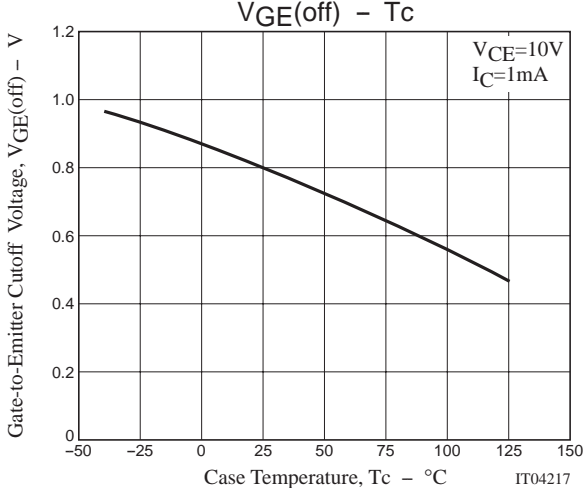
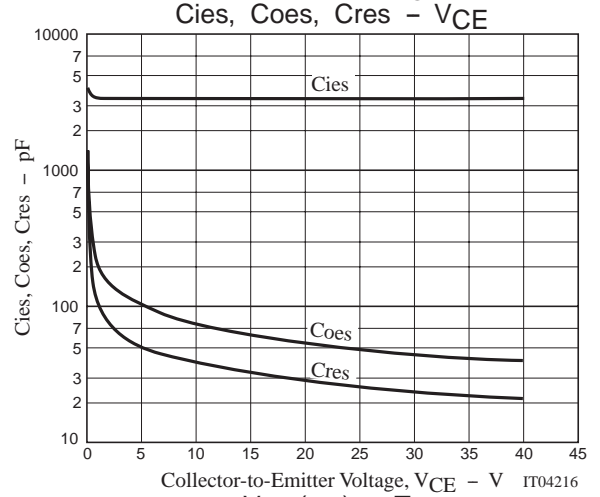
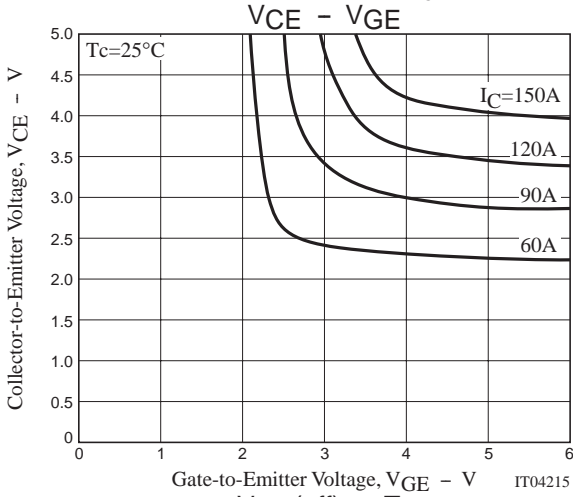
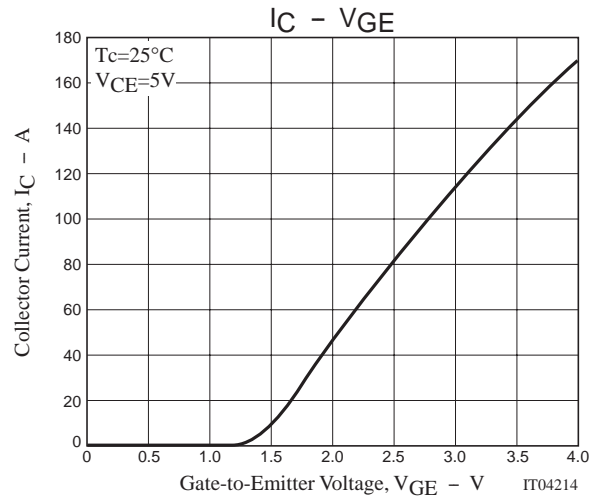
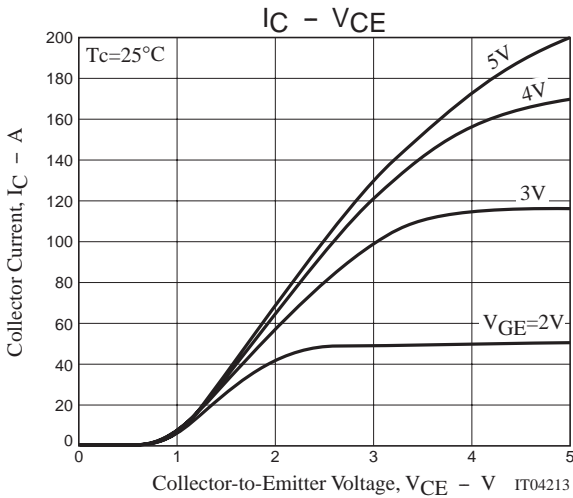
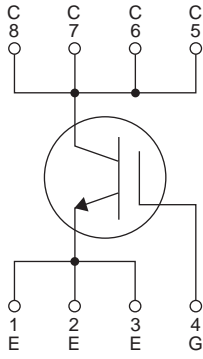
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C=5\text{mA}$, $V_{GE}=0$	400			V
Collector-to-Emitter Cutoff Current	I_{CES}	$V_{CE}=320\text{V}$, $V_{GE}=0$			10	μA
Gate-to-Emitter Leakage Current	I_{GES}	$V_{GE}=\pm 6\text{V}$, $V_{CE}=0$			± 100	nA
Gate-to-Emitter Cutoff Voltage	$V_{GE(off)}$	$V_{CE}=10\text{V}$, $I_C=1\text{mA}$	0.5		1.2	V
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=150\text{A}$, $V_{GE}=4\text{V}$		4.2	5.5	V
	$V_{CE(sat)2}$	$I_C=60\text{A}$, $V_{GE}=2.5\text{V}$		2.4	3.4	V
Input Capacitance	C_{ies}	$V_{CE}=10\text{V}$, $f=1\text{MHz}$		3300		pF
Output Capacitance	C_{oes}	$V_{CE}=10\text{V}$, $f=1\text{MHz}$		75		pF
Reverse Transfer Capacitance	C_{res}	$V_{CE}=10\text{V}$, $f=1\text{MHz}$		40		pF

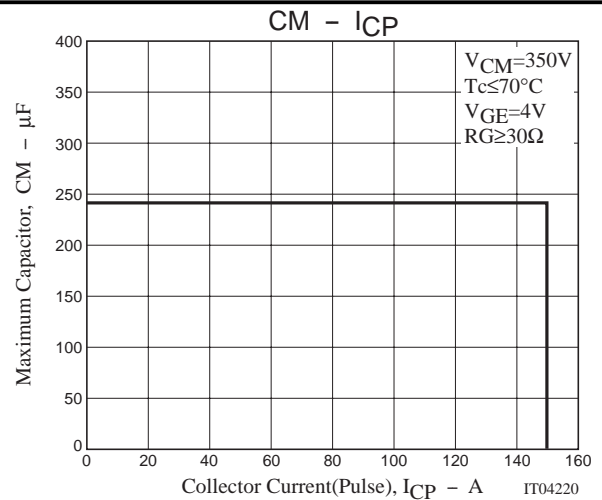
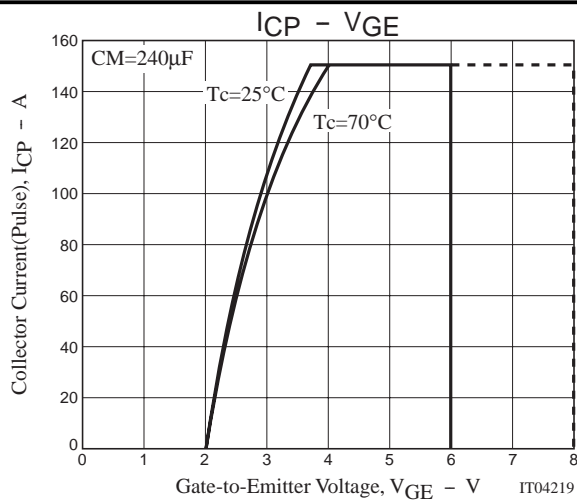
(Note) Handling the TIG002SS requires sufficient care to be taken because it has no protection diode between gate and emitter.

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Electrical Connection



TIG002SS



The gate series resistance R_G must be 30Ω or more to protect the device when it is turned off.

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