

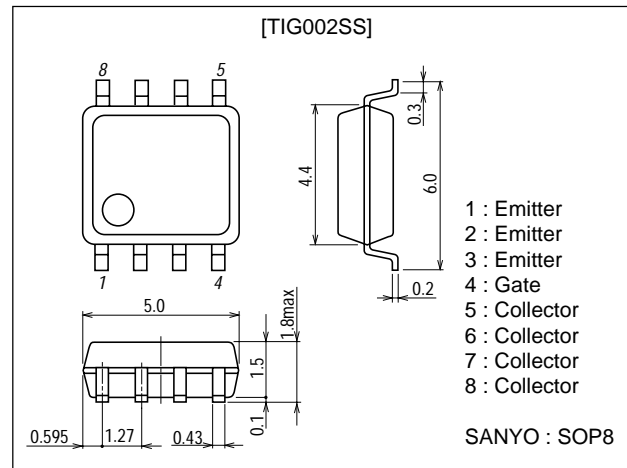
**SANYO****Light-Controlling Strobe Applications****Features**

- Low-saturation voltage.
- 4V drive.
- Enhansment 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)	$V_{GES}$		$\pm 6$	V
Gate-to-Emitter Voltage (Pulse)	$V_{GES}$		$\pm 8$	V
Collector Current (Pulse)	$I_{CP}$	$PW \leq 500\mu s$ , duty cycle $\leq 0.5\%$	150	A
Channel Temperature	$T_{ch}$		150	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$		-40 to +150	$^{\circ}\text{C}$

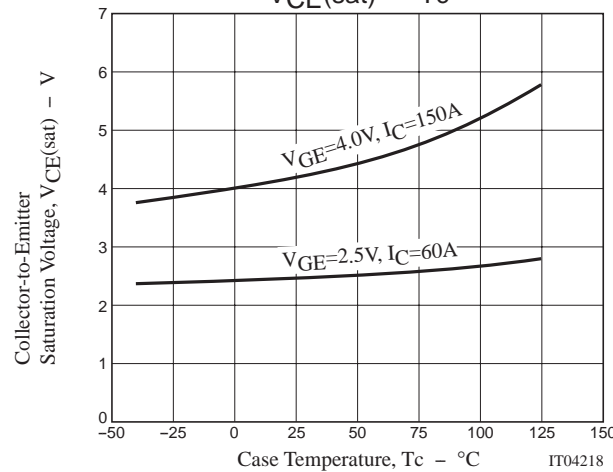
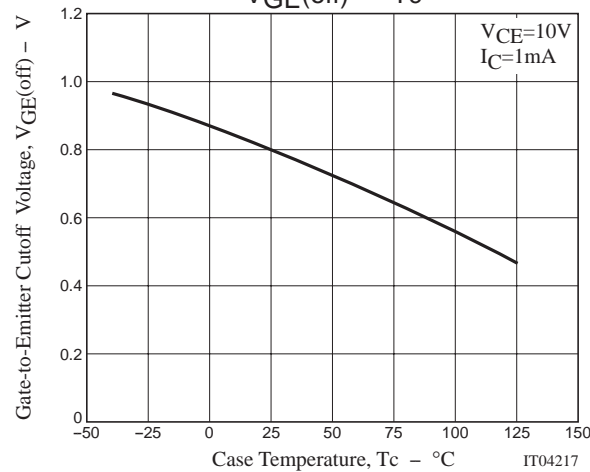
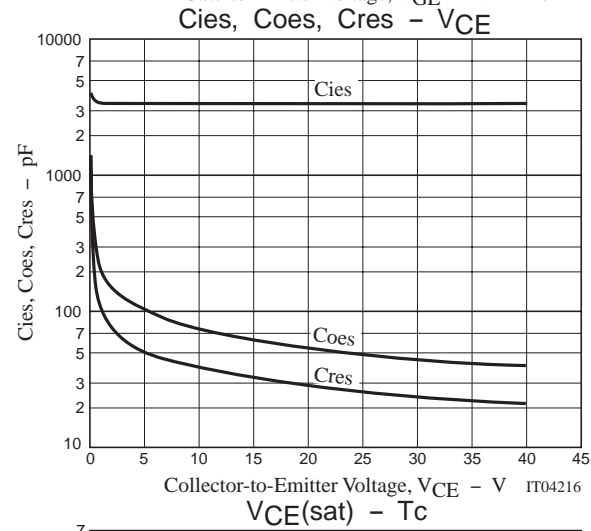
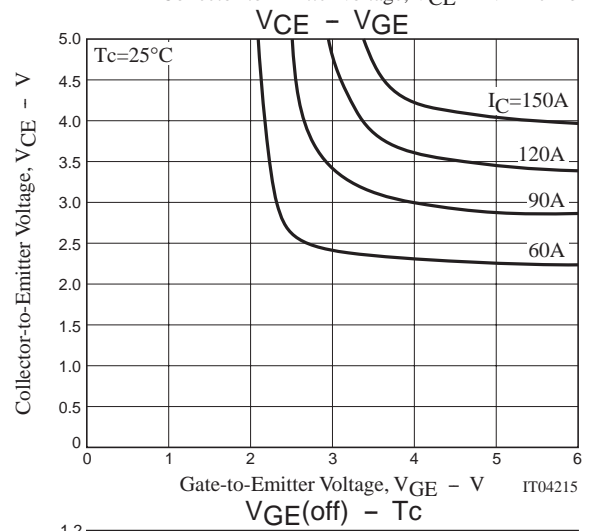
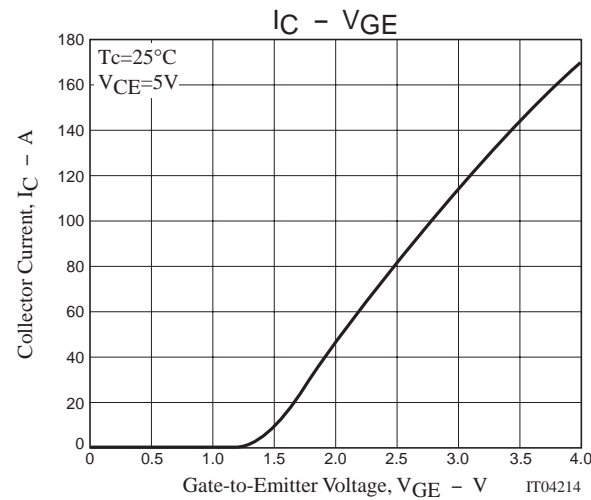
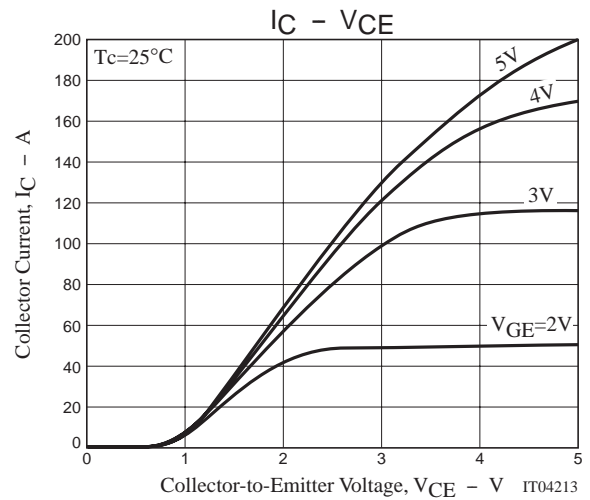
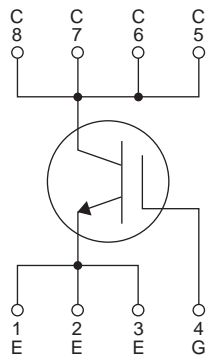
**Electrical Characteristics** at  $T_a=25^{\circ}\text{C}$ 

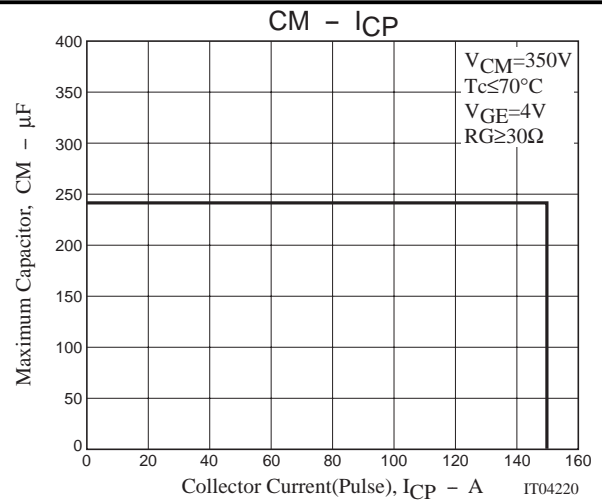
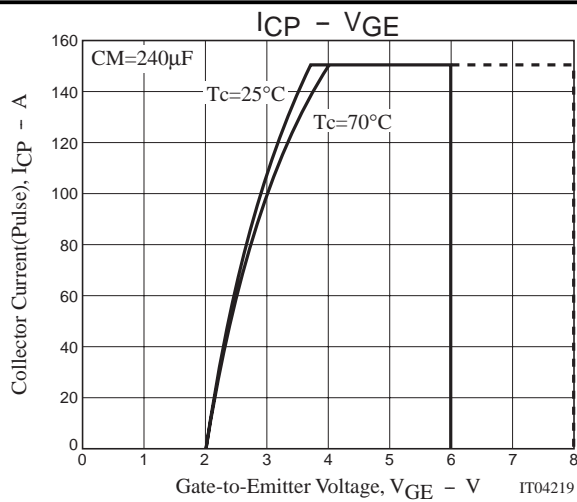
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C=5\text{mA}$ , $V_{GE}=0$	400			V
Collector-to-Emitter Cutoff Current	$I_{CES}$	$V_{CE}=320\text{V}$ , $V_{GE}=0$			10	$\mu\text{A}$
Gate-to-Emitter Leakage Current	$I_{GES}$	$V_{GE}=\pm 6\text{V}$ , $V_{CE}=0$			$\pm 100$	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





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

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