GI1952

PNP HIGH SPEED SWITCHING TRANSISTOR

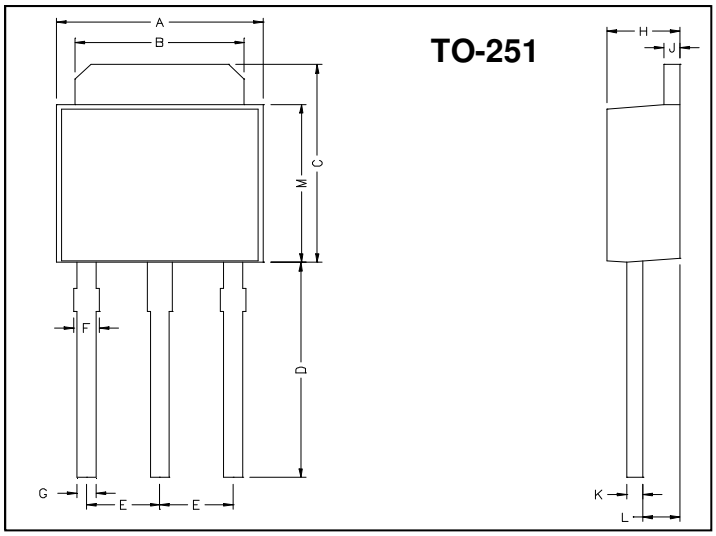
Description

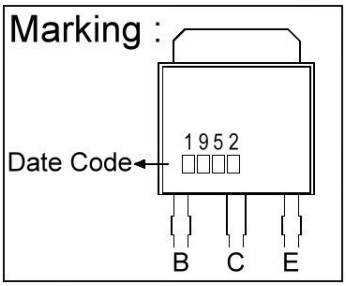
The GI1952 is designed for high speed switching applications.

Features

- Low saturation voltage, typically V_{CE}(sat) =-0.2V at I_C/I_B=-3A/-0.15A
- High speed switching, typically tf =0.15μs at I_C=-3A
- Wide SOA
- Complements to GI5103

Package Dimensions





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.40	6.80	G	0.50	0.70
B	5.20	5.50	H	2.20	2.40
C	6.80	7.20	J	0.45	0.55
D	7.20	7.80	K	0.45	0.60
E	2.30 REF.		L	0.90	1.50
F	0.60	0.90	M	5.40	5.80

Absolute Maximum Ratings (T_A=25℃)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-100	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-5	A
Collector Current (Pulse)	I_C	-10	A
Total Device Dissipation (T_A=25℃)	P_D	1	W
Total Device Dissipation (T_C=25℃)	P_D	10	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

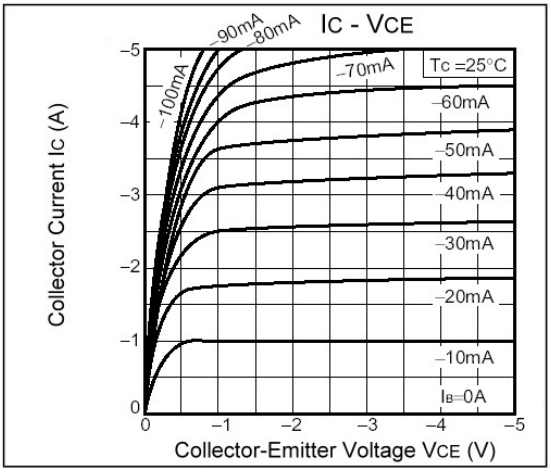
Electrical Characteristics (T_A = 25℃ unless otherwise noted)

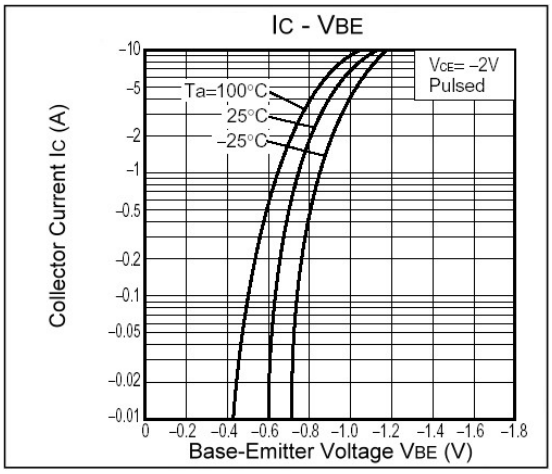
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-100	-	-	V	I_C=-50uA, I_E=0
BV_{CEO}	-60	-	-	V	I_C=-1mA, I_B=0
BV_{EBO}	-5	-	-	V	I_E=-50uA, I_C=0
I_{CBO}	-	-	-10	uA	V_{CB}=-100V, I_E=0
I_{EBO}	-	-	-10	uA	V_{EB}=-5V, I_C=0
*$V_{CE(sat)}$1	-	-	-0.3	V	I_C=-3A, I_B=-0.15A
*$V_{CE(sat)}$2	-	-	-0.5	V	I_C=-4A, I_B=-0.2A
*$V_{BE(sat)}$1	-	-	-1.2	V	I_C=-3A, I_B=-0.15A
*$V_{BE(sat)}$2	-	-	-1.5	V	I_C=-4A, I_B=-0.2A
*h_{FE}1	120	-	270		V_{CE}=-2V, I_C=-1A
*h_{FE}2	40	-	-		V_{CE}=-2V, I_C=-3A
fT	-	80	-	MHz	V_{CE}=-10V, I_E=0.5A, f=30MHz
Cob	-	130	-	pF	V_{CB}=-10V, I_E=0, f=1MHz

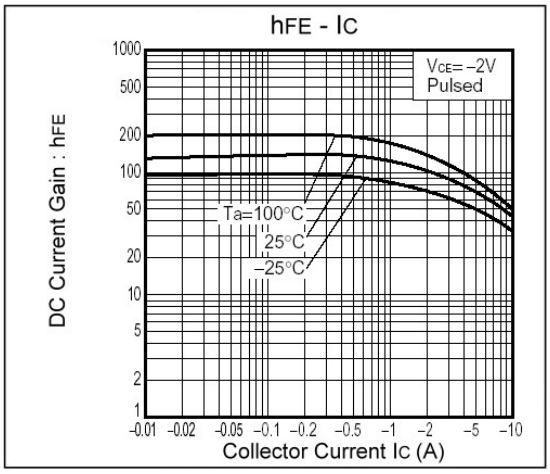
t_{on} (Turn-on Time)	-	-	0.3	uS	I_C=-3A , R_L=10Ω I_{B1}=-I_{B2}=-0.15A V_{CC}≈-30V
t_{stg} (Storage Time)	-	-	1.5		
t_f (Fall Time)	-	-	0.3		

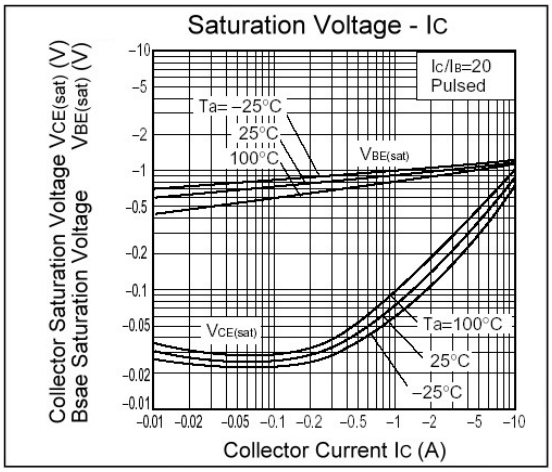
***Measure using pulse current**

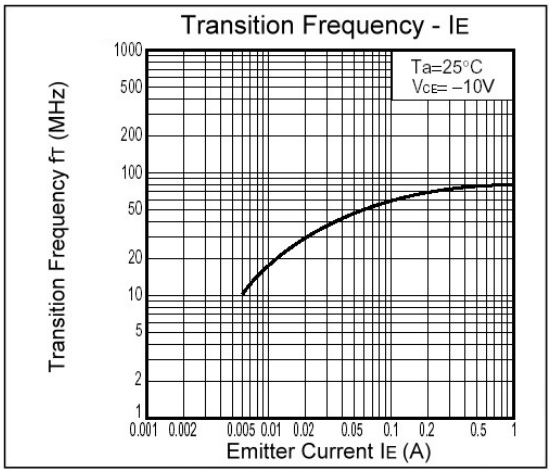
Characteristics Curve

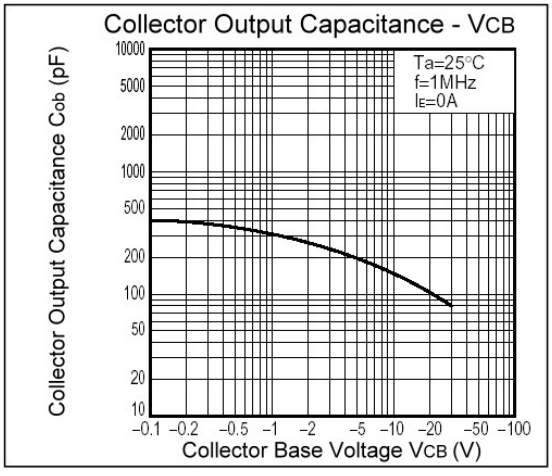


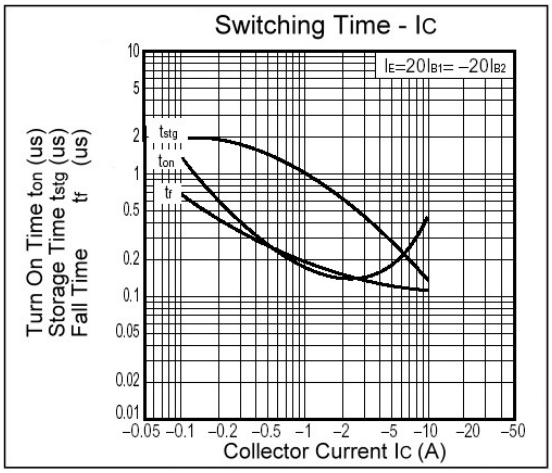












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