

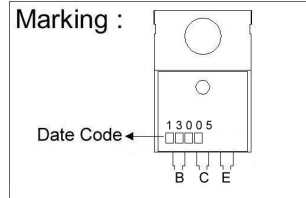
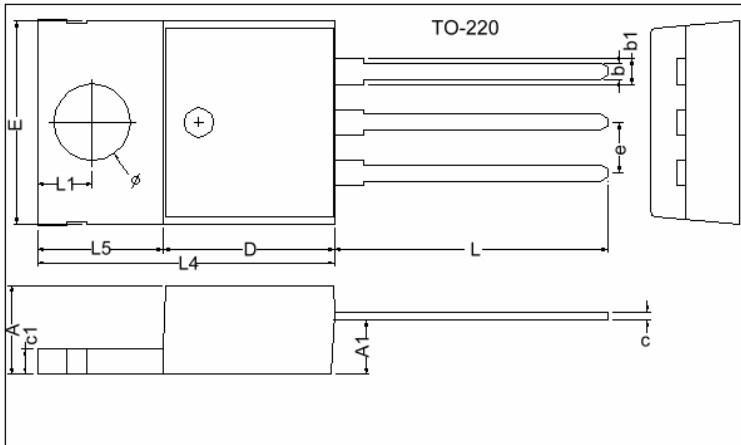
GE13005

NPN SILICON TRIPLE DIFFUSED MESA TYPE TRANSISTOR

Description

The GE13005 is designed for electronic transformers and power switching circuit applications.

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.80	c1	1.25	1.45
b	0.76	1.00	b1	1.17	1.47
c	0.36	0.50	L	13.25	14.25
D	8.60	9.00	e	2.54 REF.	
E	9.80	10.4	L1	2.60	2.89
L4	14.7	15.3	∅	3.71	3.96
L5	6.20	6.60	A1	2.60	2.80

Absolute Maximum Ratings at Ta = 25°C

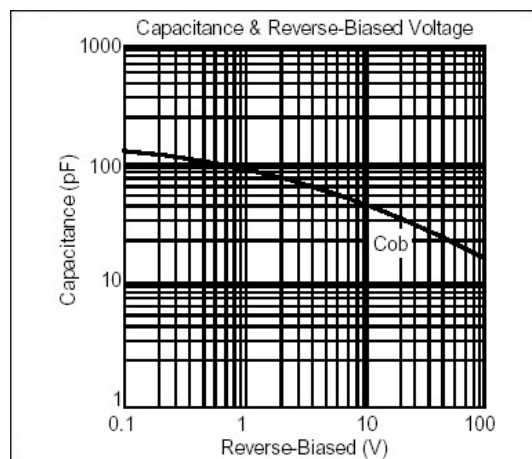
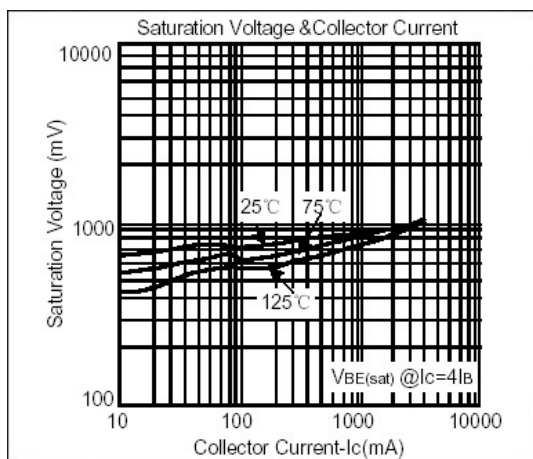
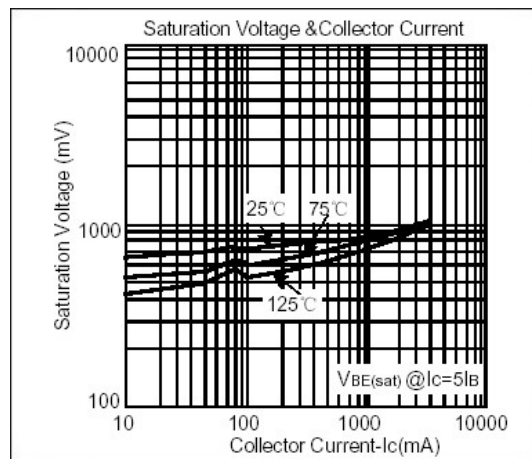
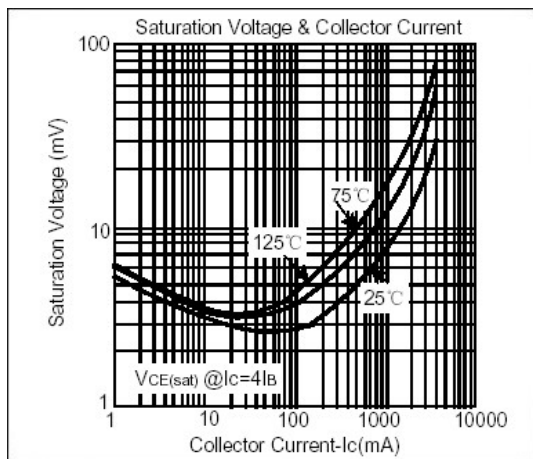
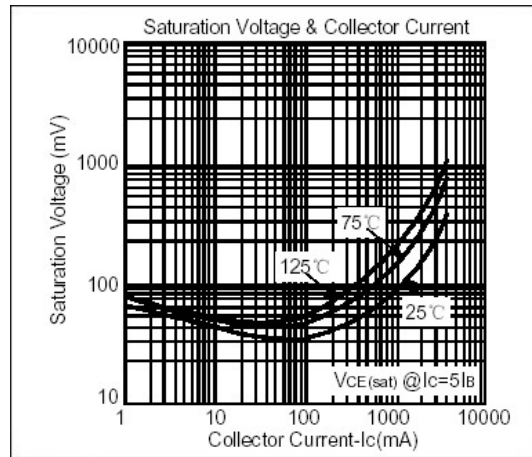
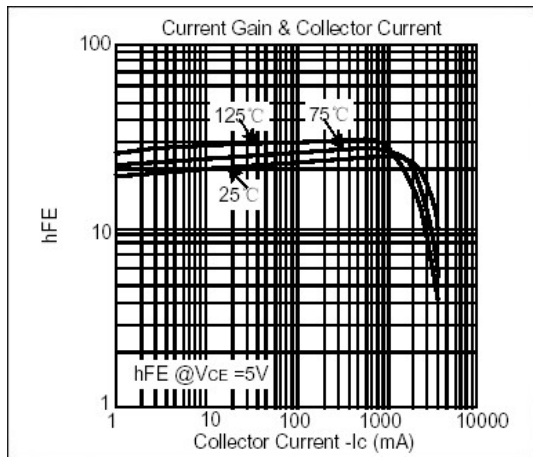
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage	VCBO	700	V
Collector to Emitter Voltage	VCEO	400	V
Emitter to Base Voltage	VEBO	9	V
Collector Current	IC	4	A
Total Power Dissipation at Tc=25°C	PD	75	W

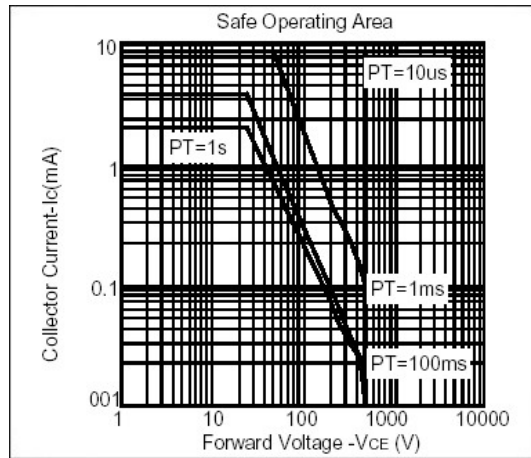
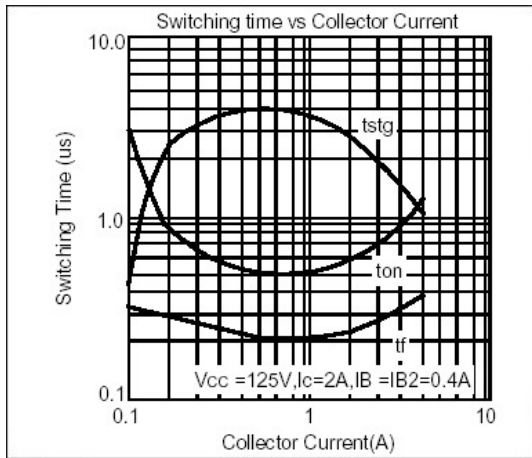
Electrical Characteristics(Tc = 25°C Unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Emitter Sustaining Voltage	VCEO(sus)	400	-	-	V	IC=10mA, IB=0
Collector-Base Breakdown Voltage	BVCBO	700	-	-	V	IC=1mA, IE=0
Emitter-Base Breakdown Voltage	BVEBO	9	-	-	V	IE=1mA, IC=0
Collector Cutoff Current	ICBO	-	-	100	μA	VCB=700V
Collector-Emitter Cutoff Current	ICEO	-	-	50	μA	VCE=400V
Emitter-Base Cutoff Current	IEBO	-	-	10	μA	VEB=7V
Collector-Emitter Saturation Voltage	*VCE(sat)1	-	-	0.8	V	IC=1A, IB=200mA
	*VCE(sat)2	-	-	2.0	V	IC=4A, IB=1A
Base-Emitter Saturation Voltage	*VBE(sat)	-	-	1.6	V	IC=2A, IB=500mA
DC Current Gain	*HFE1	8	-	60		VCE=10V, IC=500mA
	*HFE2	5	-	40		VCE=5V, IC=2A
Frequency characteristics	fT	4	-	-	MHz	VCE=10V, IC=500mA, f=1MHz
Turn-On Time	ton	-	-	0.8	μs	VCC=125V, IC=2A, IB1=IB2=0.4A
Storage Time	tstg	-	-	4		
Fall Time	tf	-	-	0.9		

*Pulse Test: Pulse Width=300μs, Duty Cycle ≤ 2%

Characteristics Curve





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