Ordering number : EN3338

SANYO No.3338

2SC4475

NPN Triple Diffused Planar Silicon Transistor

High-Voltage Amp, High-Voltage Switching Applications

Applications
- High voltage amp
- High voltage switching
- Dynamic focus

Features
- High breakdown voltage (V_{CEO} min = 1800V)
- Small c_{ob} (c_{ob} typ = 1.4pF)
- Wide ASO
- High reliability (Adoption of HVP process)

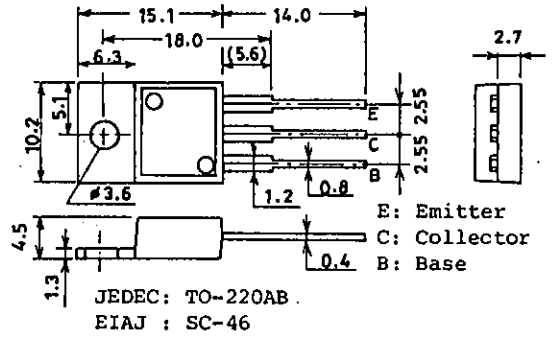
Absolute Maximum Ratings at Ta = 25°C

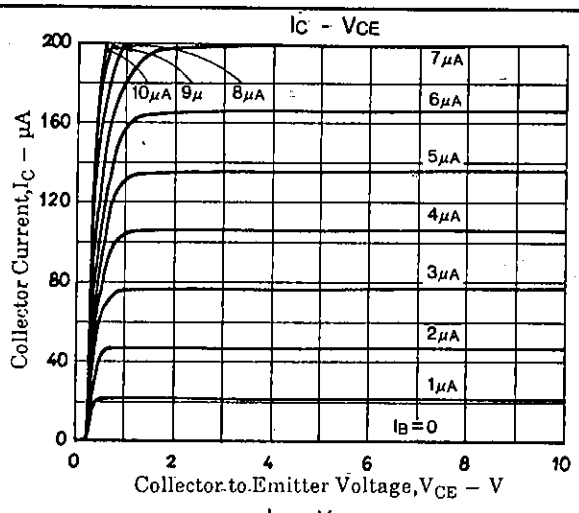
			unit
Collector-to-Base Voltage	V_{CBO}	2000	V
Collector-to-Emitter Voltage	V_{CEO}	1800	V
Emitter-to-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	3	mA
Peak Collector Current	i_{cp}	10	mA
Collector Dissipation	P_C	1.75	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

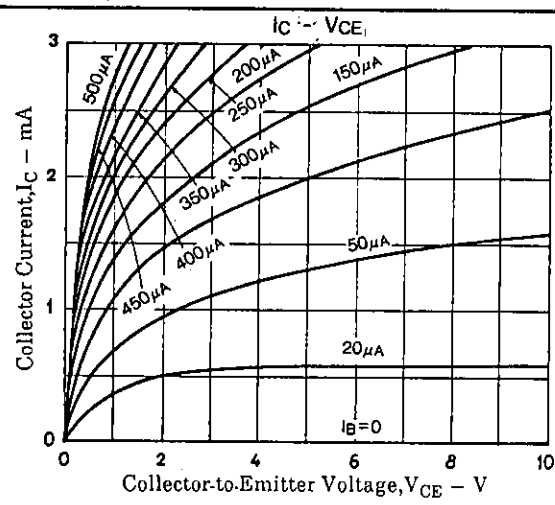
Electrical Characteristics at Ta = 25°C

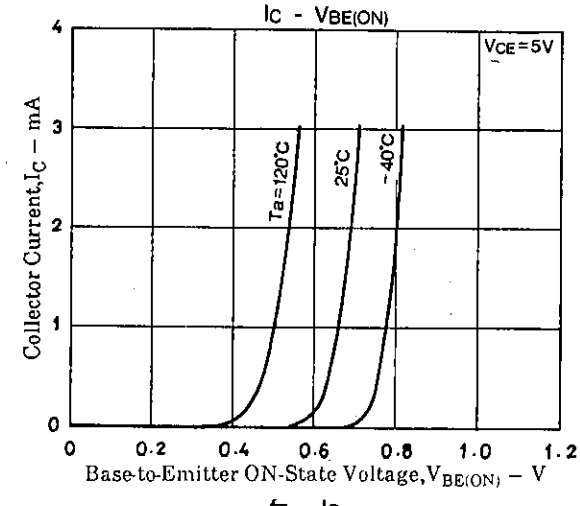
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 1800V, I_E = 0			1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V, I_C = 0			1	μA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 100μA	10		60	
Gain-Bandwidth Product	f_T	V_{CE} = 10V, I_C = 200μA		6		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = 200μA, I_B = 40μA			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = 200μA, I_B = 40μA			2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	2000			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100μA, R_{BE} = ∞	1800			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	5			V
Output Capacitance	c_{ob}	V_{CB} = 100V, f = 1MHz		1.4		pF

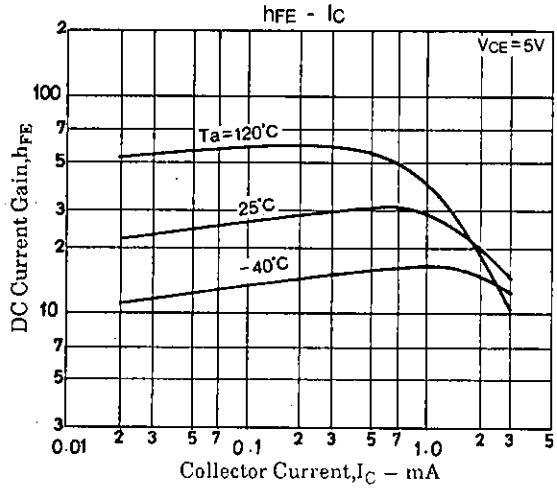
Package Dimensions 2010B
(unit: mm)

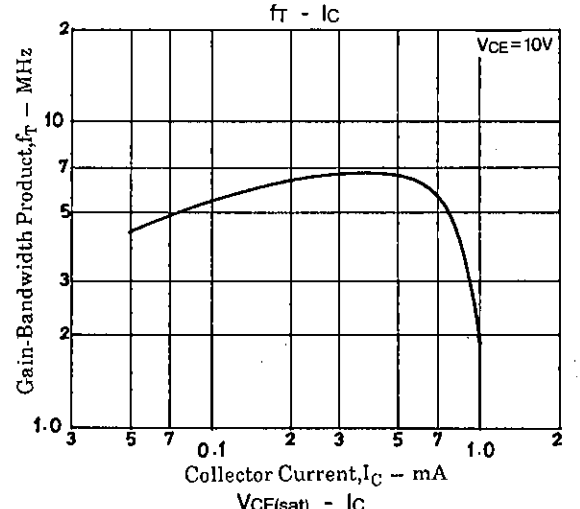


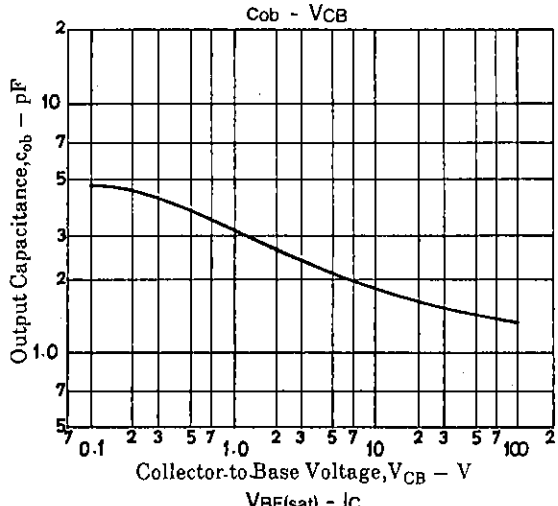

IC - VCE
Collector Current, IC – μA
Collector-to-Emitter Voltage, VCE – V
7μA
6μA
5μA
4μA
3μA
2μA
1μA
IB=0
10μA
9μ
8μA

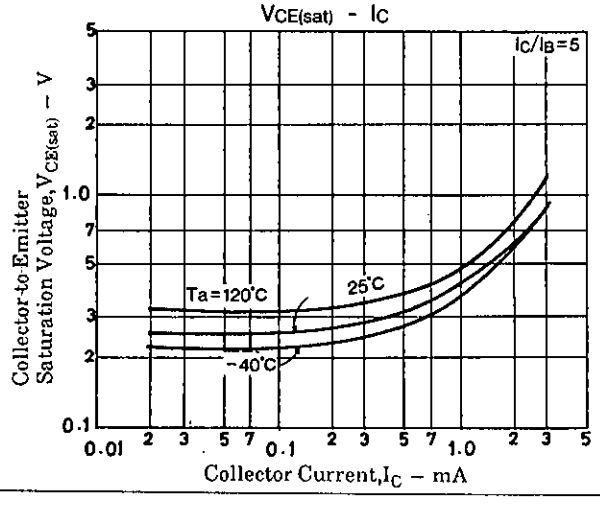

IC - VCE
Collector Current, IC – mA
Collector-to-Emitter Voltage, VCE – V
500μA
200μA
150μA
250μA
300μA
350μA
400μA
450μA
50μA
20μA
IB=0

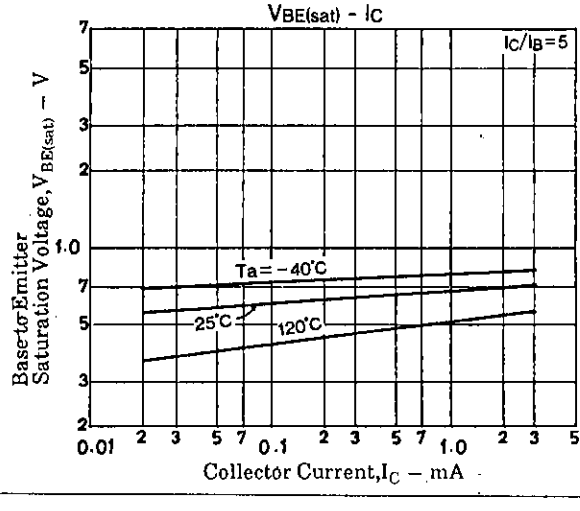

IC - VBE(ON)
Collector Current, IC – mA
Base-to-Emitter ON-State Voltage, VBE(ON) – V
VCE=5V
Ta=120°C
25°C
-40°C


hFE - IC
DC Current Gain, hFE
Collector Current, IC – mA
VCE=5V
Ta=120°C
25°C
-40°C


fT - IC
Gain-Bandwidth Product, fT – MHz
Collector Current, IC – mA
VCE=10V


Cob - VCB
Output Capacitance, Cob – pF
Collector-to-Base Voltage, VCB – V


VCE(sat) - IC
Collector-to-Emitter Saturation Voltage, VCE(sat) – V
Collector Current, IC – mA
IC/IB=5
Ta=120°C
25°C
-40°C


VBE(sat) - IC
Base-to-Emitter Saturation Voltage, VBE(sat) – V
Collector Current, IC – mA
IC/IB=5
Ta=-40°C
25°C
120°C