Ordering number: EN3234

SANYO

No.3234

2SC4480

NPN Epitaxial Planar Silicon Transistor

Low-Frequency General-Purpose Amp, General Driver Applications

Features

- Large current capacity
- Adoption of MBIT process
- High DC current gain
- Low collector-to-emitter saturation voltage
- High V_{EBO}

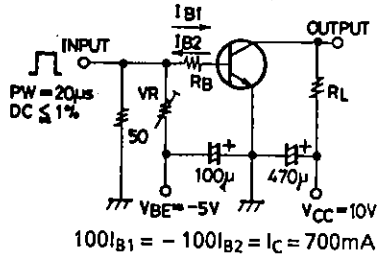
Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	15	V
Collector Current	I_C	2	A
Collector Current(Pulse)	I_{CP}	4	A
Base Current	I_B	0.4	A
Collector Dissipation	P_C	1	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}=20V,I_E=0			100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=10V,I_C=0			100	nA
DC Current Gain	$h_{FE}(1)$	V_{CE}=5V,I_C=500mA	800	1500	3200	
	$h_{FE}(2)$	V_{CE}=5V,I_C=1A	600			
Gain-Bandwidth Product	f_T	V_{CE}=10V,I_C=50mA		260		MHz
Output Capacitance	c_{ob}	V_{CB}=10V,f=1MHz		27		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=1A,I_B=20mA		0.15	0.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=1A,I_B=20mA		0.85	1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA,R_{BE}=∞	25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	15			V
Turn-ON Time	t_{on}	See specified Test Circuit.		0.14		μs
Storage Time	t_{stg}	〃		1.35		μs
Fall Time	t_f	〃		0.1		μs

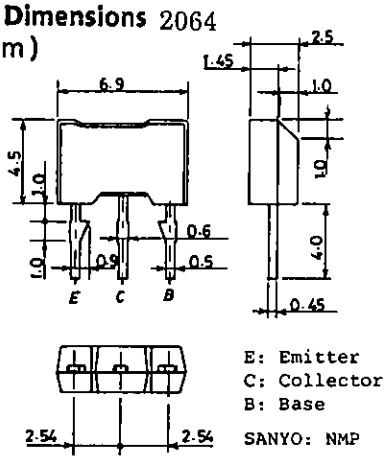
Switching Time Test Circuit



$100I_{B1} = -100I_{B2} = I_C = 700mA$

Unit(Resistance : Ω , Capacitance : F)

Package Dimensions 2064 (unit: mm)



E: Emitter
C: Collector
B: Base
SANYO: NMP

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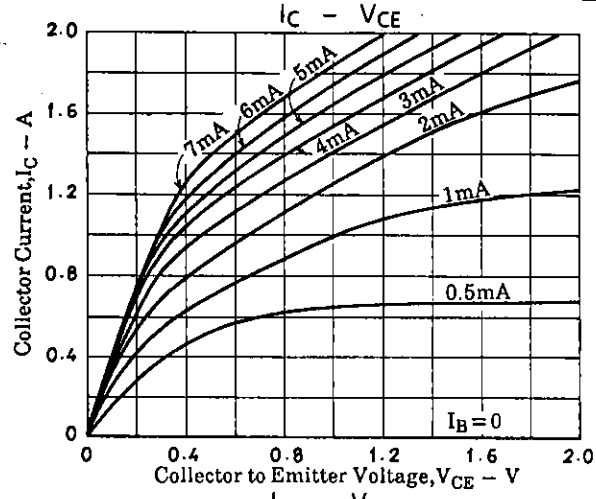
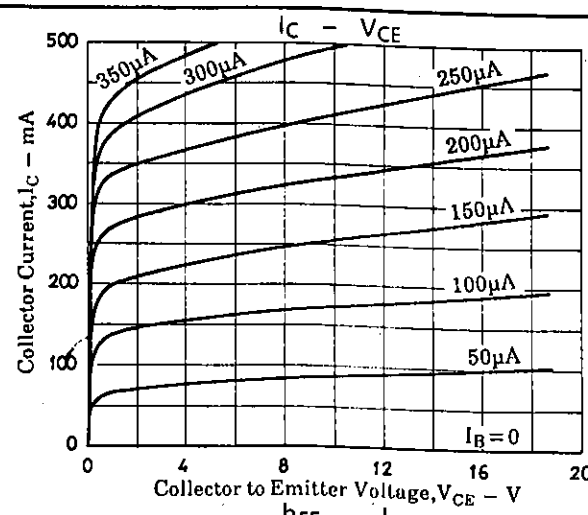
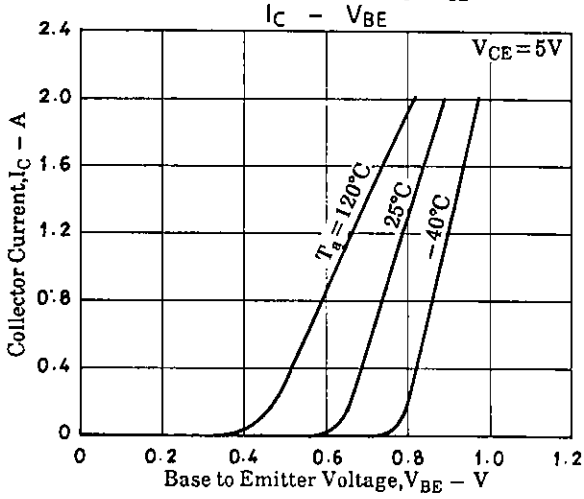
I_C – V_{CE}



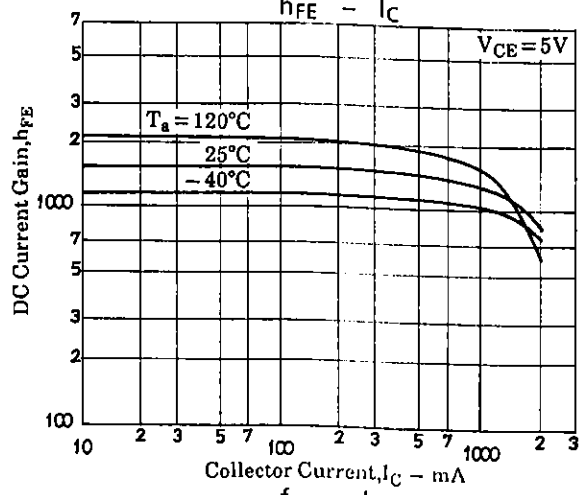
I_C – V_{CE}



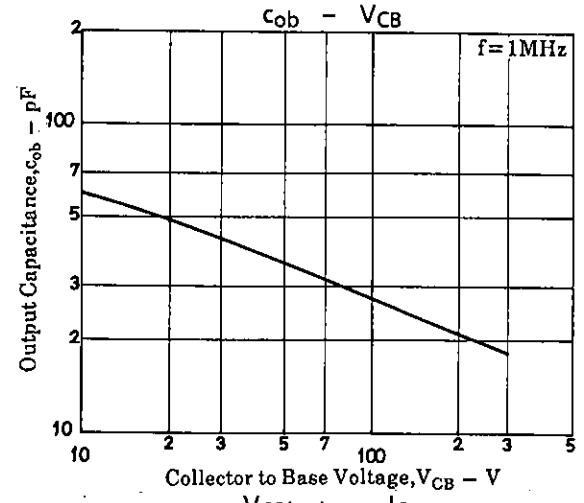
I_C – V_{BE}



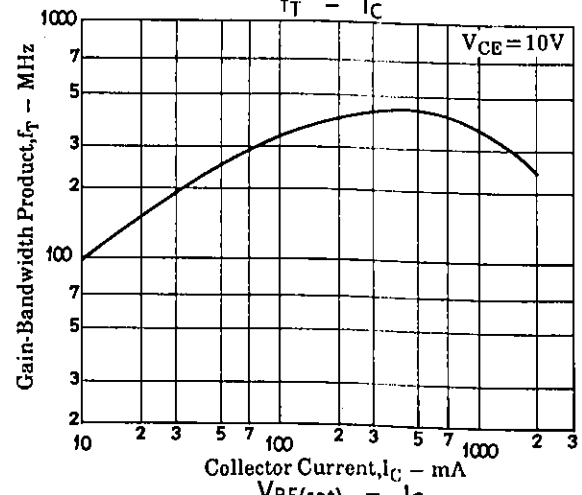
h_{FE} – I_C



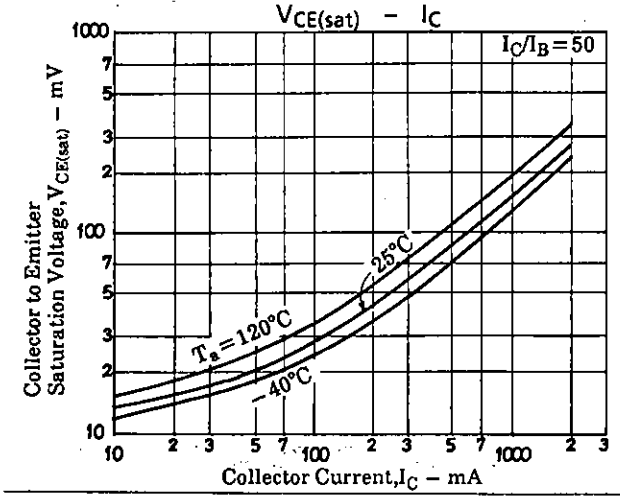
C_{ob} – V_{CB}



f_T – I_C



$V_{CE(sat)}$ – I_C



$V_{BE(sat)}$ – I_C