Ordering number: EN 3241

SANYO

No.3241

2SC4449

NPN Triple Diffused Planar Silicon Transistor

TV Camera Deflection, High-Voltage Driver Applications

Features

- High breakdown voltage
- Small reverse transfer capacitance and excellent high frequency characteristic
- Excellent DC current gain
- Adoption of FBET process

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Current(Pulse)	I_{CP}	100	mA
Collector Dissipation	P_C	600	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

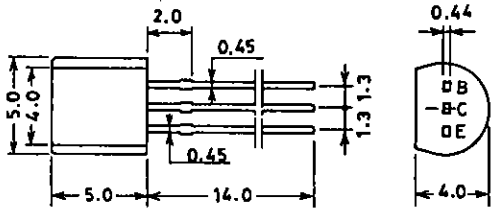
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=200V,I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V,I_C=0			0.1	μA
DC Current Gain	$h_{FE}(1)$	V_{CE}=6V,I_C=0.1mA	100		320	
	$h_{FE}(2)$	V_{CE}=6V,I_C=1mA	100			
DC Current Gain Ratio	h_{FE} ratio	$h_{FE}(1)/h_{FE}(2)$		0.95		
Gain-Bandwidth Product	f_T	V_{CE}=30V,I_C=10mA		70		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=10mA,I_B=1mA			1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=10mA,I_B=1mA			1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	300			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA,R_{BE}=∞	300			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	5			V
Output Capacitance	c_{ob}	V_{CB}=30V,f=1MHz		1.5		pF
Reverse Transfer Capacitance	c_{re}	V_{CB}=30V,f=1MHz		1.0		pF

※ : The 2SC4449 is classified by 0.1mA h_{FE} as follows :

100 E 200	160 F 320

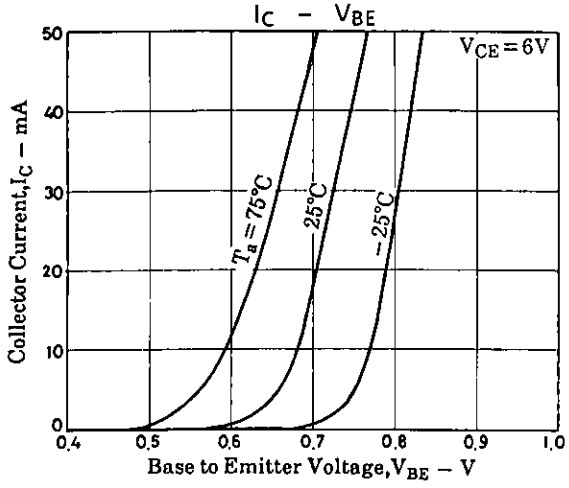
Package Dimensions 2003A
(unit: mm)



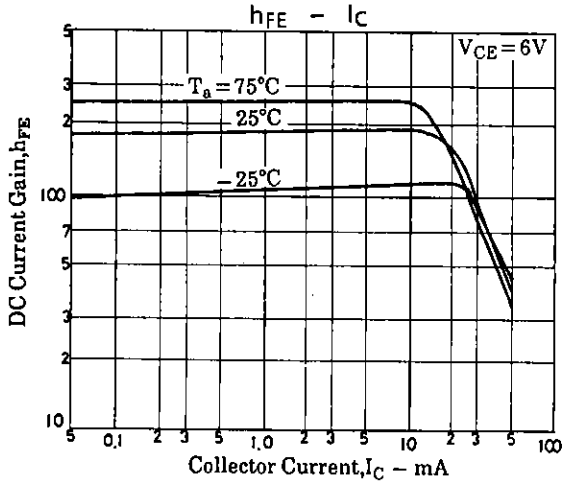
JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

B: Base
C: Collector
E: Emitter

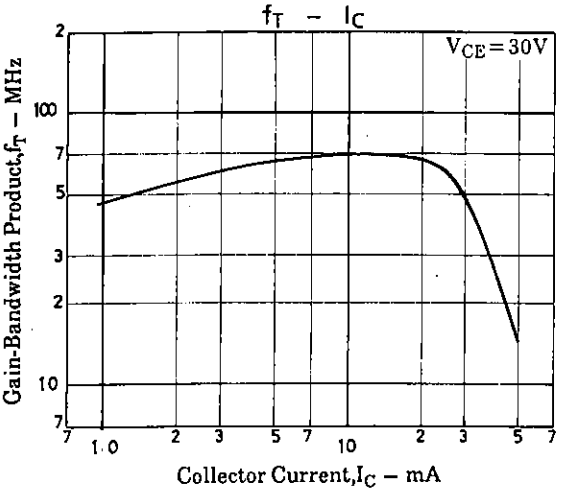
I_C – V_{BE}



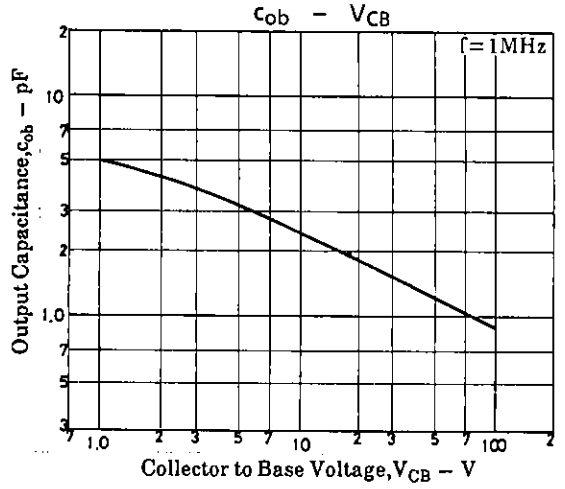
h_{FE} – I_C



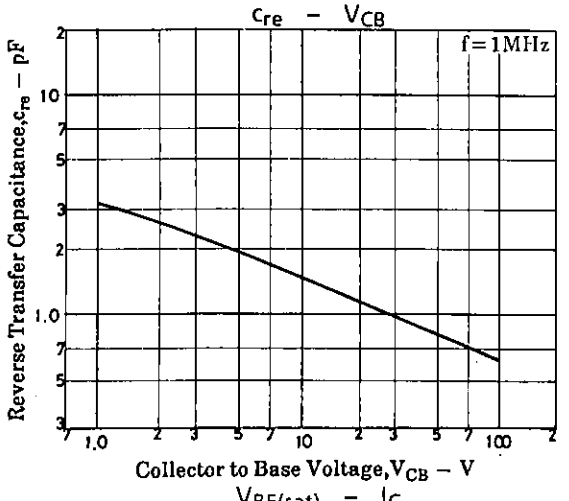
f_T – I_C



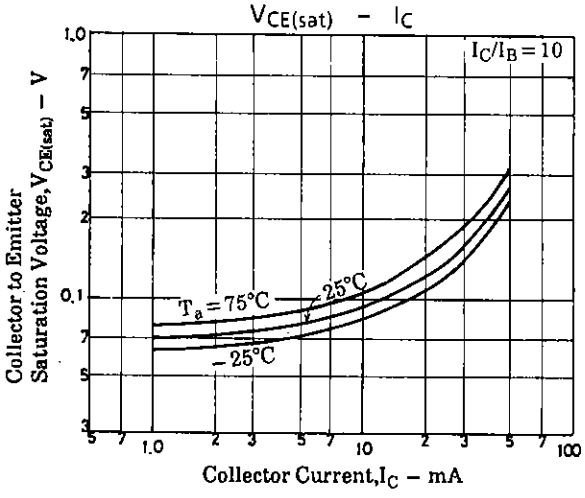
C_{ob} – V_{CB}



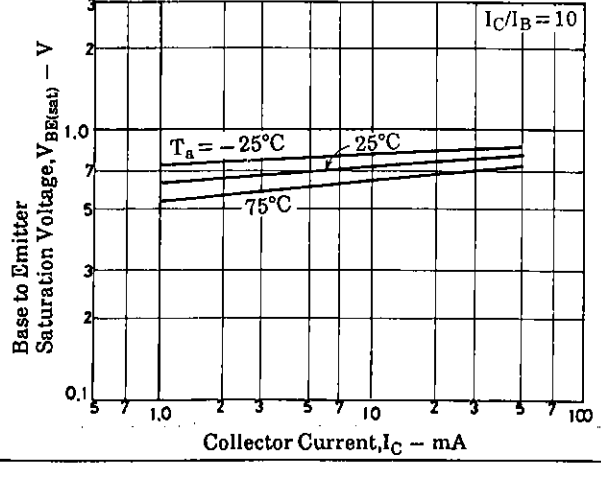
C_{re} – V_{CB}



$V_{CE(sat)}$ – I_C



$V_{BE(sat)}$ – I_C



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