Ordering number:EN3241

NPN Triple Diffused Planar Silicon Transistor

2SC4449

TV Camera Deflection, High-Voltage Driver Applications

Features

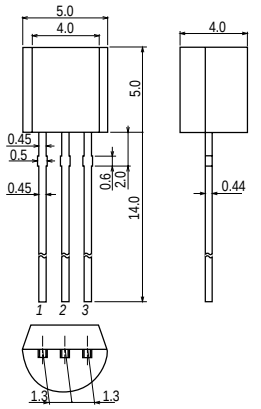
- High breakdown voltage.
- Small reverse transfer capacitance and excellent high frequency characteristic.
- Excellent DC current gain.
- Adoption of FBET process.

Package Dimensions

unit:mm

2003B

[2SC4449]



1 : Emitter
2 : Collector
3 : Base
SANYO : NP
JEDEC : TO-92
EIAJ : SC-43

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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

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

100	E	200	160	F	320

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			1.0	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA, I_B=1mA			1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	300			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	300			V
Emitter-to-Base 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