Ordering number:EN4728

PNP Epitaxial Planar Silicon Transistor

2SC4563

Ultrahigh-Definition CRT Display Video Output Applications

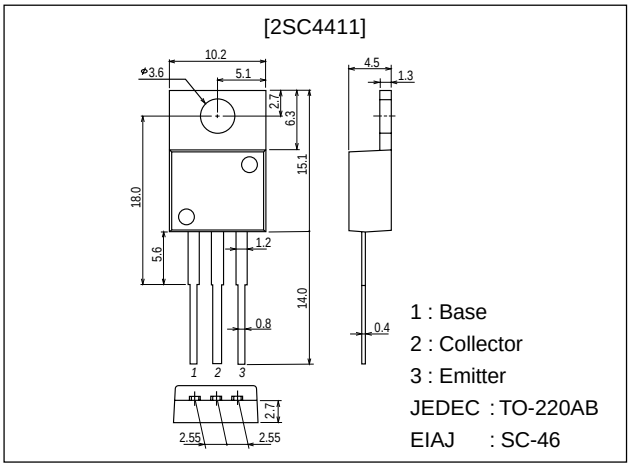
Features

- High f_T : f_T=1.2GHz typ.
- High breakdown voltage : V_{CEO}≥80V.
- High current : I_C=500mA.
- Small reverse transfer capacitance : C_{re}=3.8pF (V_{CB}=30V).
- Adoption of FBET process.

Package Dimensions

unit:mm

2010C



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		100	V
Collector-to-Emitter Voltage	V_{CEO}		80	V
Emitter-to-Base Voltage	V_{EBO}		3	V
Collector Current	I_C		500	mA
Collector Current (Pulse)	I_{CP}		1.0	A
Collector Dissipation	P_C		1.3	W
		Tc=25˚C	10	W
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}=80V, I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=2V, I_C=0			5.0	μA
DC Current Gain	$h_{FE}1$	V_{CE}=10V, I_C=50mA	30		200	
	$h_{FE}2$	V_{CE}=10V, I_C=500mA	20			
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=100mA		1.2		GHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=300mA, I_B=30mA			0.6	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=300mA, I_B=30mA			1.2	V

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-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	100			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	80			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	3			V
Output Capacitance	C_{ob}	V_{CB}=30V, f=1MHz		4.4		pF
Reverse Transfer Capacitance	C_{re}	V_{CB}=30V, f=1MHz		3.8		pF