Ordering number:EN3242

NPN Triple Diffused Planar Silicon Transistor

2SC4578

900V/50mA Switching Applications

Features

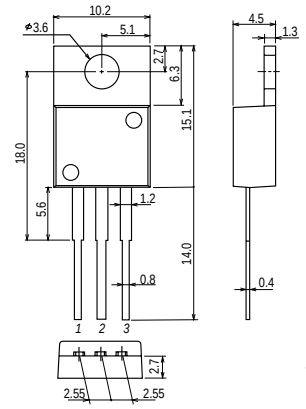
- High breakdown voltage.
- Small Cob.
- Wide ASO.
- High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2010C

[2SC4578]



1 : Base
2 : Collector
3 : Emitter
JEDEC : TO-220AB
EIAJ : SC-46

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		1700	V
Collector-to-Emitter Voltage	V_{CEO}		900	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		50	mA
Collector Current (Pulse)	I_{CP}		150	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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=900V, 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=2mA	20	50	120	
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=2mA		6		MHz
Output Capacitance	Cob	V_{CB}=100V, f=1MHz		2		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=5mA, I_B=1mA			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=5mA, I_B=1mA			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=1mA, I_E=0	1700			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	900			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=1mA, I_C=0	5			V