Ordering number:EN3700A

NPN Triple Diffused Planar Silicon Transistor

2SC4631

900V/300mA High-Voltage Amplifier, High-Voltage Switching Applications

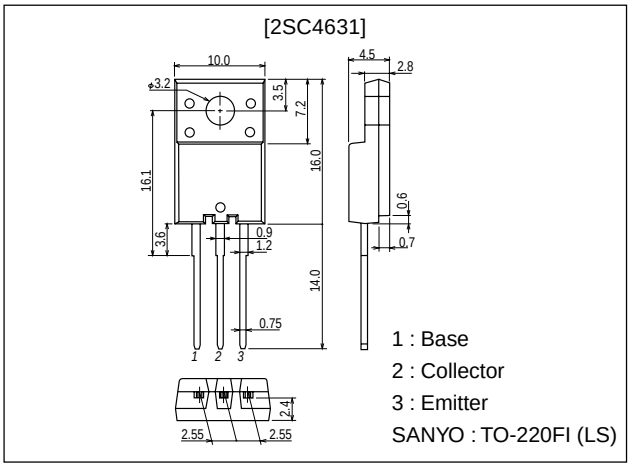
Features

- High breakdown voltage (V_{CEO} min=900V).
- Small Cob (typical Cob=5.0pF).
- Full-isolation package.
- High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2079B



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		1500	V
Collector-to-Emitter Voltage	V_{CEO}		900	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		300	mA
Collector Current (Pulse)	I_{CP}		1	A
Collector Dissipation	P_C		2	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			10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0			10	μA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=30mA	30			
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=30mA		6		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=60mA, I_B=12mA			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=60mA, I_B=12mA			2	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=1mA, I_E=0	1500			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

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	
Output Capacitance	Cob	V_{CB}=100V, f=1MHz		5.0		pF
Thermal Resistance	Rthj-c	Junction – case			6.25	˚C/W