Ordering number:EN3706A

NPN Triple Diffused Planar Silicon Transistor

2SC4637

1800V/15mA High-Voltage Amplifier, High-Voltage Switching Applications

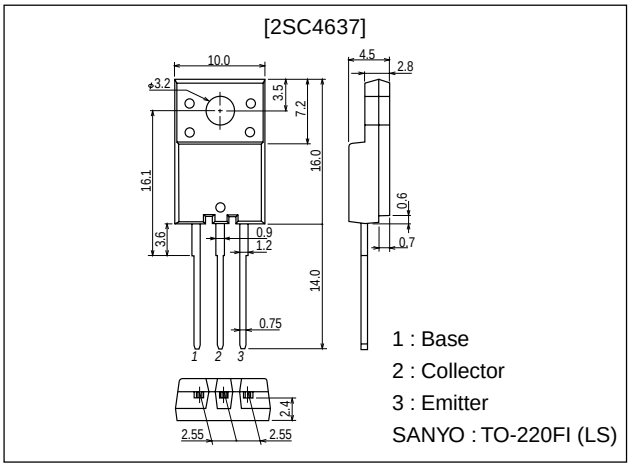
Features

- High breakdown voltage (V_{CEO} min=1800V).
- Small Cob (typical Cob=1.8pF).
- 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}		2000	V
Collector-to-Emitter Voltage	V_{CEO}		1800	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		15	mA
Collector Current (Pulse)	I_{CP}		50	mA
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}=1800V, 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=300μA	10		60	
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=300μA		6		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=600μA, I_B=120μA			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=600μA, I_B=120μA			2	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	2000			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=100μA, R_{BE}=∞	1800			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA, 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		1.8		pF
Thermal Resistance	Rthj-c	Junction – case			8.3	˚C/W