Ordering number:EN3099

NPN Triple Diffused Planar Silicon Transistor

2SC4493

High-Voltage Amplifier, High-Voltage Switching Applications

Features

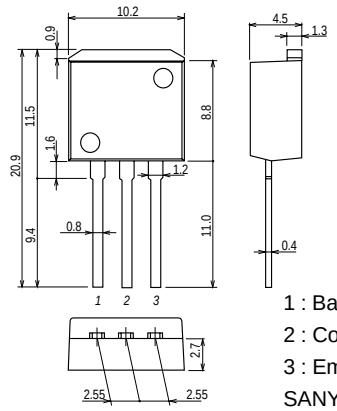
- High breakdown voltage.
- Small C_{ob}.
- High reliability (Adoption of HVP process).
- Intended for high-density mounting (Suitable for sets whose height is restricted).

Package Dimensions

unit:mm

2049C

[2SC4493]



1 : Base
2 : Collector
3 : Emitter
SANYO : TO-220MF

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		800	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EBO}		7	V
Collector Current	I_C		20	mA
Collector Current (Pulse)	I_{CP}		60	mA
Collector Dissipation	P_C		1.65	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}=800V, I_E=0			1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			1	μA
DC Current Gain	$h_{FE}1$	V_{CE}=5V, I_C=2mA	20		50	
	$h_{FE}2$	V_{CE}=5V, I_C=10mA	10			
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=2mA		40		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA, I_B=2mA			1	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA, I_B=2mA			1.5	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	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	800			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	800			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	7			V
Output Capacitance	C_{ob}	V_{CB}=100V, f=1MHz		1.6		pF