NPN Planar Silicon Transistor



2SC3294

Driver Applications

Applications

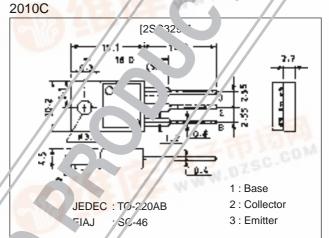
· Suitable for use in switching of L load (motor drivers, printer hammer drivers, relay drivers).

Features

- · High DC current gain.
- · Large current capacity and wide ASO.
- · On-chip Zener diode of 60±10V between collector and base.
- · Uniformity in collector-to-base breakdown voltage due to adoption of accurate impurity diffusion process.
- · High inductive load handling capability.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCPO		50*	V
Collector-to-Emitter Voltage	VSEO		50*	V
Emitter-to-Base Voltage	V _E BO		6	V
Collector Current	Ic		3	Α
Collector Current (Pulse)	ICP		6	Α
Base Current	lp		0.6	А
Collector Dissipation	C 1c 25°C		25	W
Junction Temperature	Ti	//	150	°C
Storage Temperature	Tsis		-55 to +150	°C

^{*:} With Zener diode (60±10V)

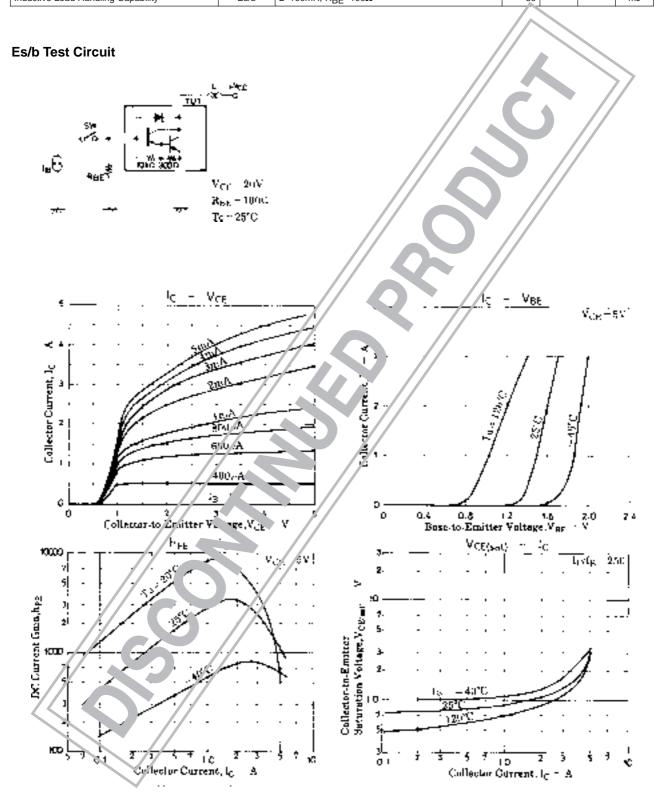
Electrical Characteristics at Ta 25

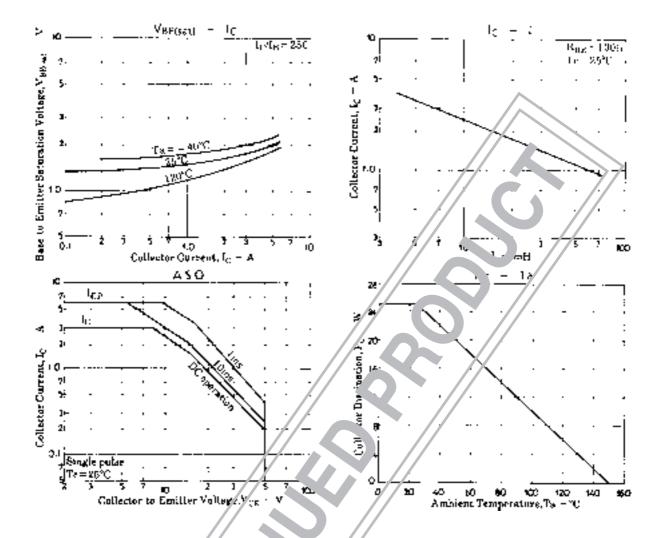
Parameter Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector Cutoff Curren	ICEO	V _{CB} =40V, I _E =0			10	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0		-11	2	mA
DC Current Gain	ρ _{FE}	V _{CE} =5V, I _C =1.5A	1000	4000	60.	
Gain-Bandwidth P oduct	f _T	V _{CE} =5V, I _C =1.5A	ou W	180		MHz
Collector-to-F_mitter Satura or olta >	VCE(sat)	I _C =1.5A, I _B =6mA		1.0	1.5	V
Base-to-Ernitter Satura Volta	V _{BE(sat)}	I _C =1.5A, I _B =6mA			2.0	V

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Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Offic
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =0.1mA, I _E =0	50	60	70	V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	50	60	70	V
Inductive Load Handling Capability	Es/b	L=100mH, Rpc=100Ω	30			mJ





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