NPN Triple Diffused Planar Silicon Transistor

2SC3675



900V/100mA High-Voltage Amplifier High-Voltage Switching Applications

Applications

- \cdot High voltage amplifiers.
- \cdot High-voltage switching applications.
- · Dynamic focus applications.

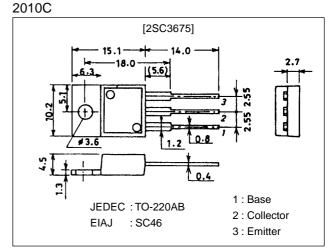
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Features

- \cdot High breakdown voltage (V_{CEO} min=900V).
- · Small Cob (Cob typ=2.8pF).
- · Wide ASO (Adoption of MBIT process).
- · High reliability (Adoption of HVP process).

Package Dimensions

unit:mm



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	VCEO		900	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	ι _C		100	mA
Collector Current (Pulse)	I _{CP}		300	mA
Collector Dissipation	PC	Tc=25°C	10	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

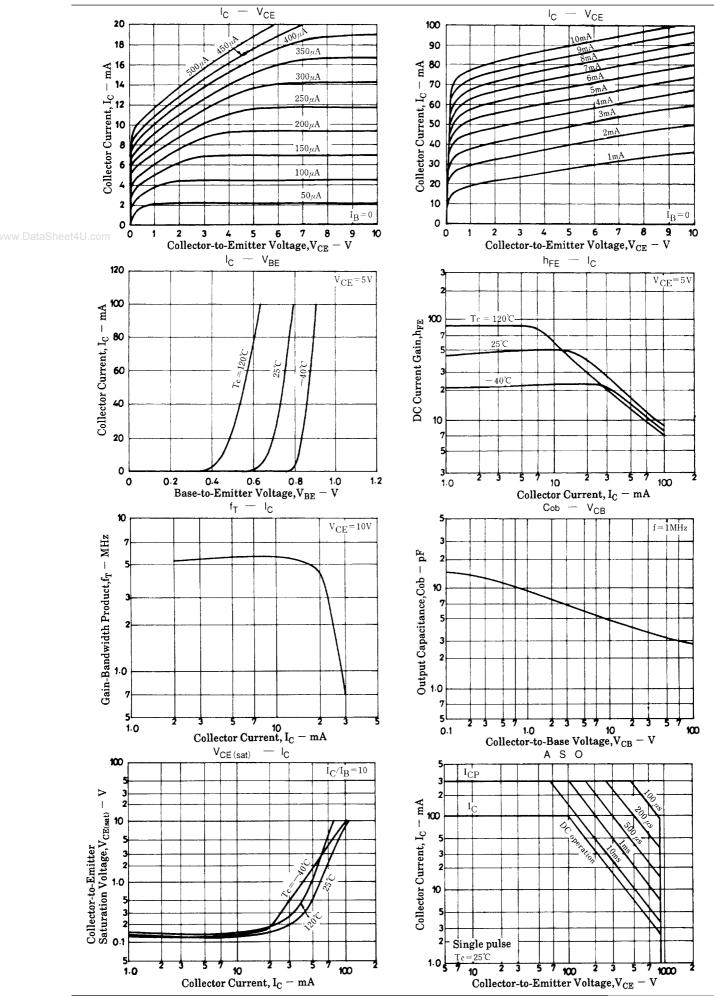
Electrical Characteristics at Ta = 25°C

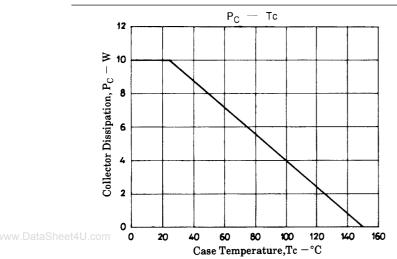
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =900V, I _E =0			10	μA
Emitter Cutoff Current	IEBO	V _{EB} =4V, I _C =0			10	μΑ
DC Current Gain	hFE	V _{CE} =5V, I _C =10mA	30			
Gain-Bandwidth Product	fT	V _{CE} =10V, I _C =10mA		6		MHz
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =20mA, I _B =4mA			5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =20mA, I _B =4mA			2	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	IC=1mA, IE=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
Output Capacitance	Cob	V _{CB} =100V, f=1MHz		2.8		pF

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