
2SC4702

Silicon NPN Epitaxial

HITACHI

ADE-208-1120A (Z)
2nd. Edition
Mar. 2001

Application

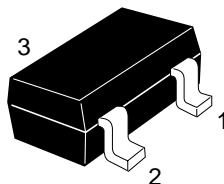
High voltage amplifier

Features

- High breakdown voltage
 $V_{CEO} = 300\text{ V}$
- Small Cob
Cob = 1.5 pF Typ.

Outline

MPAK



1. Emitter
2. Base
3. Collector

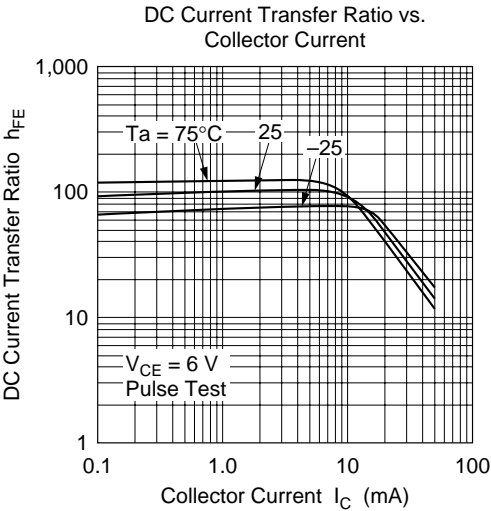
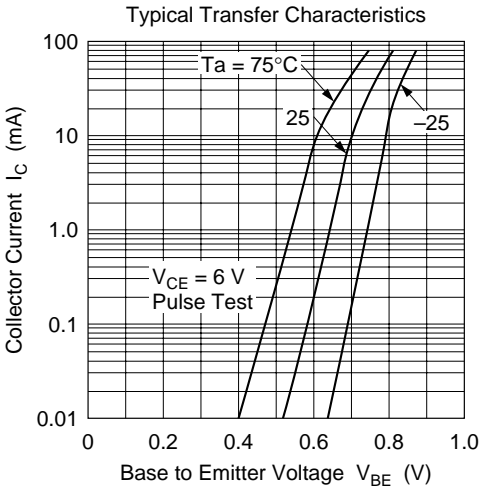
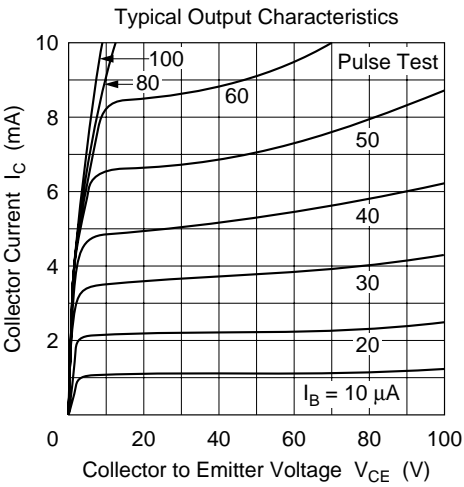
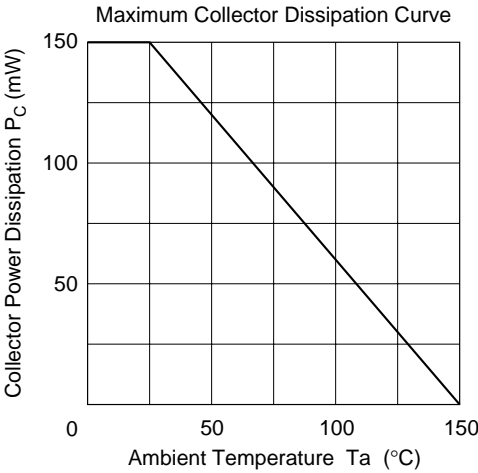
Note: Marking is "XV-".

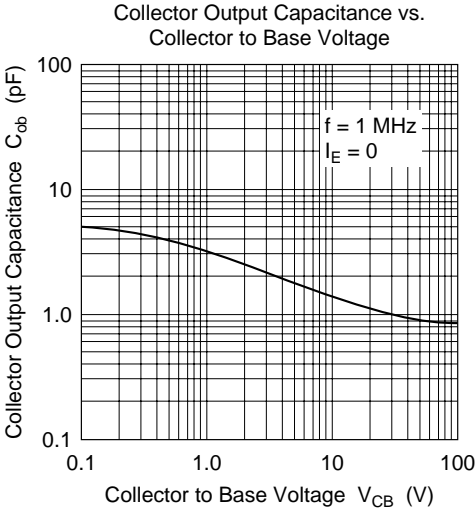
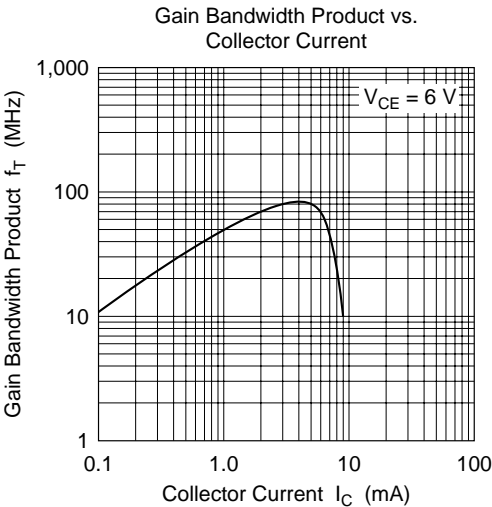
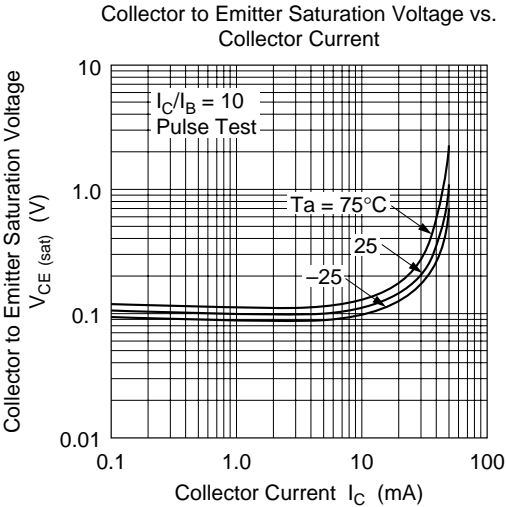
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_{C}	50	mA
Collector power dissipation	P_{C}	150	mW
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

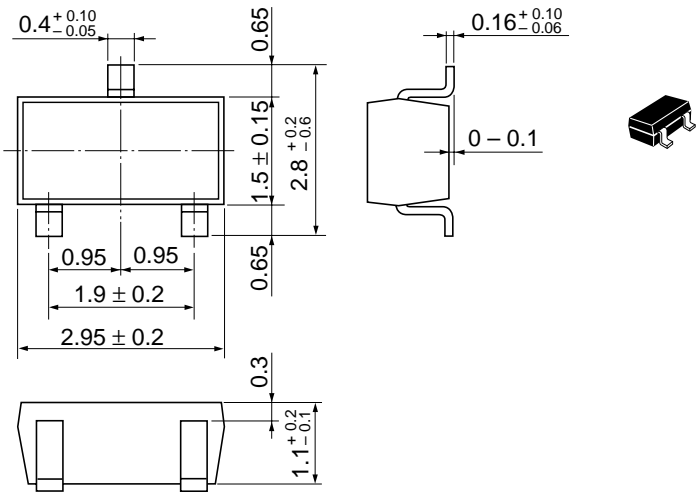
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	300	—	—	V	$I_{\text{C}} = 10\text{ }\mu\text{A}$, $I_{\text{E}} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	300	—	—	V	$I_{\text{C}} = 1\text{ mA}$, $R_{\text{BE}} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	5	—	—	V	$I_{\text{E}} = 10\text{ }\mu\text{A}$, $I_{\text{C}} = 0$
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{\text{CB}} = 250\text{ V}$, $I_{\text{E}} = 0$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	0.5	V	$I_{\text{C}} = 30\text{ mA}$, $I_{\text{B}} = 3\text{ mA}$
DC current transfer ratio	h_{FE}	60	—	150		$V_{\text{CE}} = 6\text{ V}$, $I_{\text{C}} = 2\text{ mA}$
Gain bandwidth product	f_{T}	—	80	—	MHz	$V_{\text{CE}} = 6\text{ V}$, $I_{\text{C}} = 5\text{ mA}$
Collector output capacitance	C_{ob}	—	1.5	—	pF	$V_{\text{CB}} = 10\text{ V}$, $I_{\text{E}} = 0$, $f = 1\text{ MHz}$





Package Dimensions

As of January, 2001
Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.011 g

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