

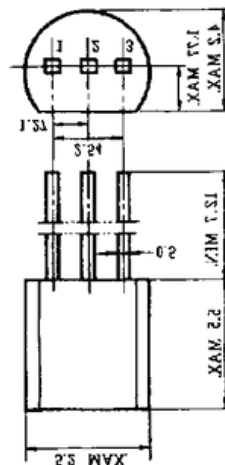
PNP SILICON EPITAXIAL TRANSISTOR
FOR HIGH VOLTAGE AMPLIFIERS

FEATURES

- High voltage
VCEO: -180 V / -200 V
(2SA1376/2SA1376A)
- Excellent hFE linearity
- High total power dissipation in small dimension:
PT: 0.75 W
- Complementary transistor with 2SC3478 and 2SC3478A

PACKAGE DRAWING (UNIT: mm)

Base IEC : 5V33
Collector JEDEC : TO-18
Emitter EIA1 : 2C-43B
Electrode Connection



ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

2SA1376/2SA1376A

Parameter	Symbol	Ratings	Unit
Collector to base voltage	VCBO	-200	V
Collector to emitter voltage	VCEO	-180/-200	V
Emitter to base voltage	VEBO	-5	V
Collector current (DC)	IC(DC)	-100	mA
Collector current (pulse)	IC(pulse)*	-200	mA
Total power dissipation	PT	0.75	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

*PW ≤ 10 ms, duty cycle ≤ 50%

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

2SA1376/2SA1376A

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Uni
Collector cutoff current	ICBO	VCB = -200 V, IE = 0			-100	t
Emitter cutoff current	IEBO	VEB = -5 V, IC = 0			-100	nA
DC current gain	hFE1 **	VCE = -10 V, IC = -10 mA	135	300/200	600/400	nA
DC current gain	hFE2 **	VCE = -10 V, IC = -100 mA	81			-
DC base voltage	VBE **	VCE = -10 V, IC = -10 mA	-600	-650	-700	mV
Collector saturation voltage	VCE(sat) *	IC = -50 mA, IB = -5 mA		-0.2	-0.3	V
Base saturation voltage	VBE(sat) *	IC = -50 mA, IB = -5 mA		-0.8	-1.2	V
Output capacitance	Cob	VCB = -30 V, IE = 0, f = 1.0		3.5	4.0	pF
Gain bandwidth product	fT	MHz VCE = -10 V, IE = 10 mA	80	120		MHz
Turn-on time	ton	IC = -10 mA, IB1 = -IB2 = -1		0.16		μs
Turn-off time	toff	mA, VCE = -10 V		1.5		μs

** Pulse test PW ≤ 350 μs, duty cycle ≤ 2% per pulsed

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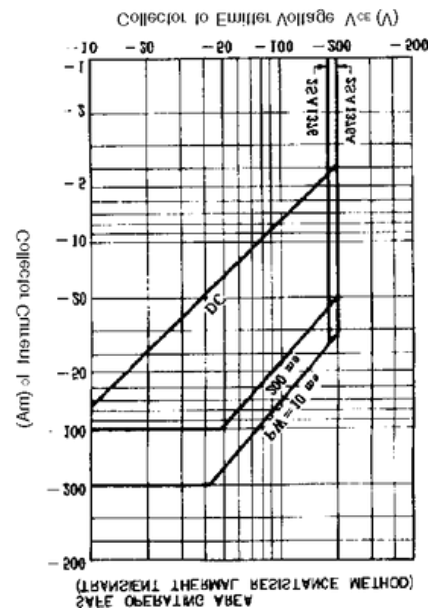
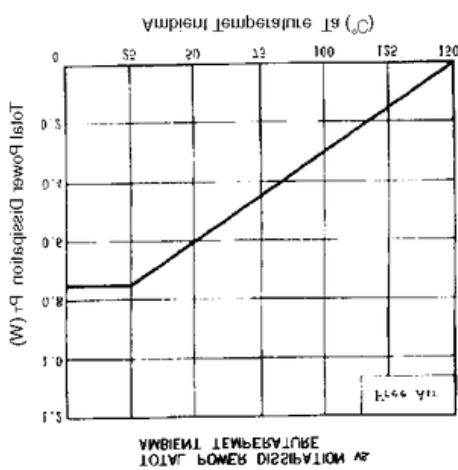
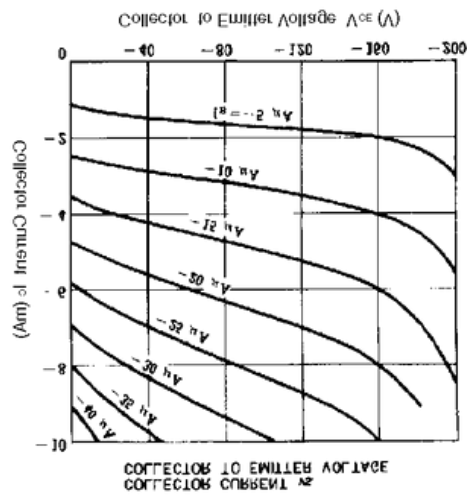
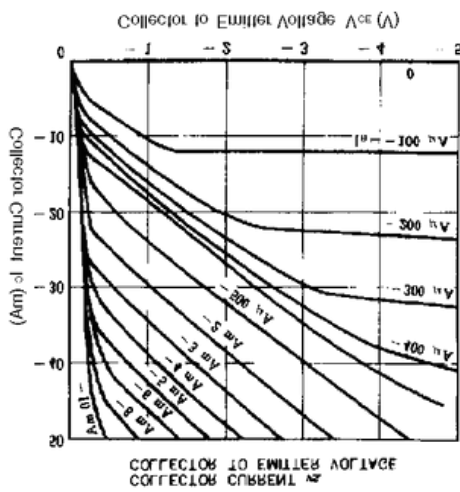
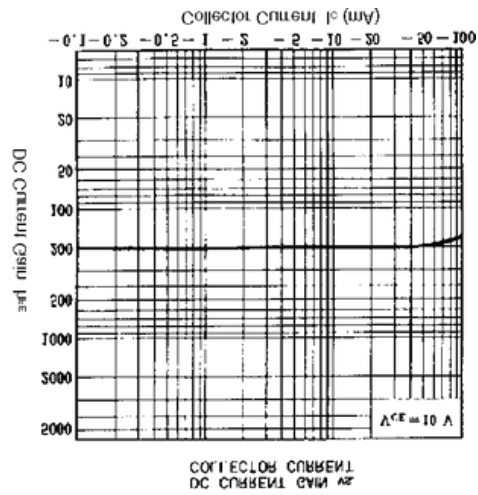
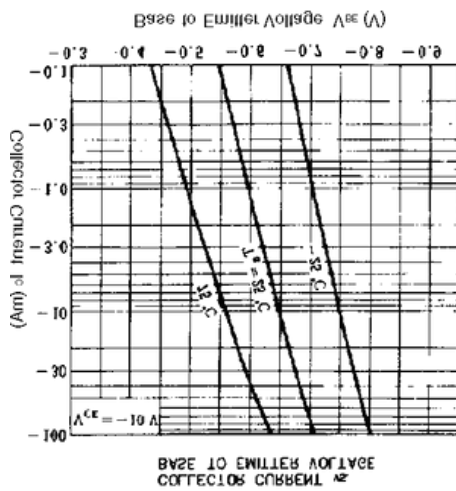
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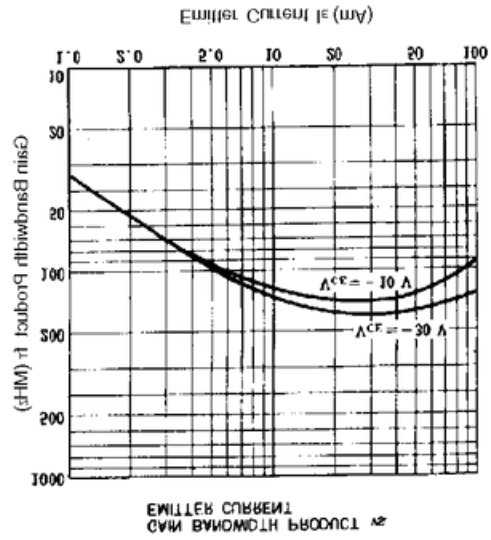
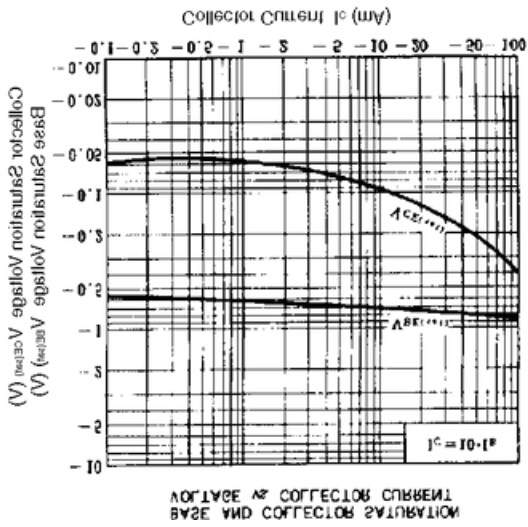
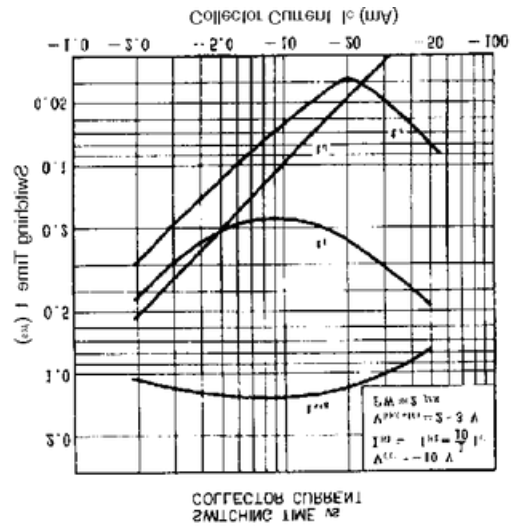
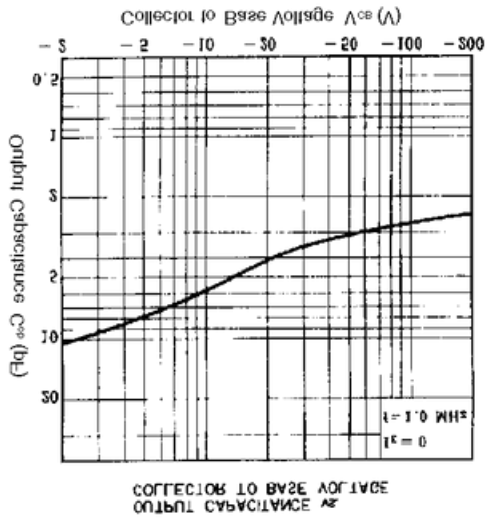
hFECLASSIFICATION

Marking	L	K	U
hFE1	135 to 270	200 to 400	300 to 600

(The U rank is not available for the 2SA1376A.)

TYPICAL CHARACTERISTICS (Ta = 25°C)





[MEMO]

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