

SANYO	No.3471	2SA1433
		PNP Epitaxial Planar Silicon Transistor High-Definition CRT Display Applications

Features

- High f_T (Gain-Bandwidth Product)
- Small reverse transfer capacitance ($c_{re} = 1.3\text{pF}$)
- Adoption of FBET process

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

			unit
Collector to Base Voltage	V_{CB0}	-70	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-4	V
Collector Current	I_C	-50	mA
Collector Current(Pulse)	I_{CP}	-100	mA
Collector Dissipation	P_C	900	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

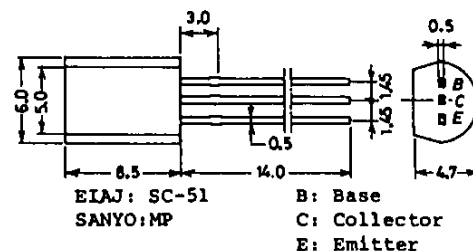
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -3\text{V}, I_C = 0$			(-)1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	60*		320*	
Gain-Bandwidth Product	f_T	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	350	700		MHz
Base to Collector Time Constant	$r_{bb}'c_c$	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$		8		ps
Output Capacitance	c_{ob}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		1.7		pF
Reverse Transfer Capacitance	c_{re}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		1.3		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -20\text{mA}, I_B = -2\text{mA}$			-0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -20\text{mA}, I_B = -2\text{mA}$			-1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-70			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-60			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-4			V

*: The 2SA1433 is classified by 10mA h_{FE} as follows:

60 D 120	100 E 200	160 F 320
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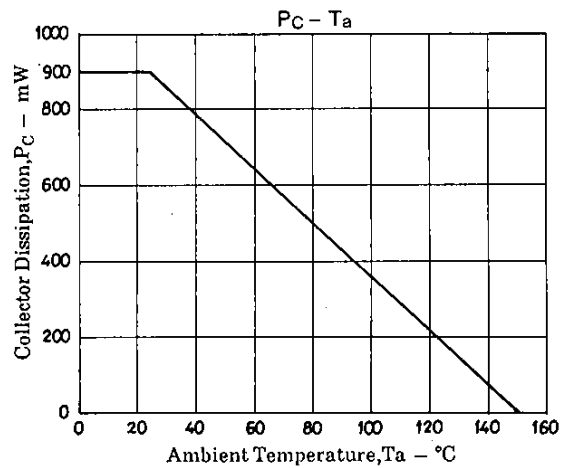
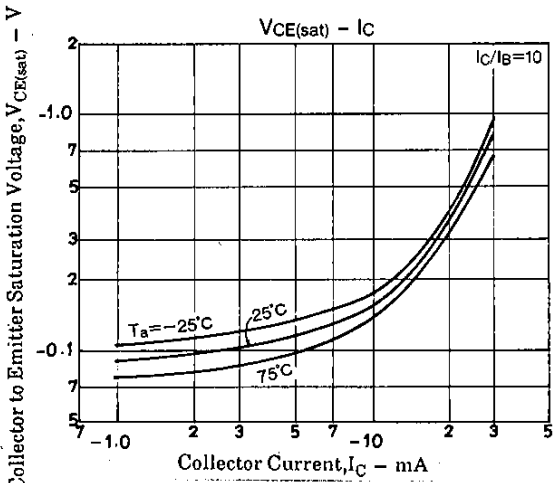
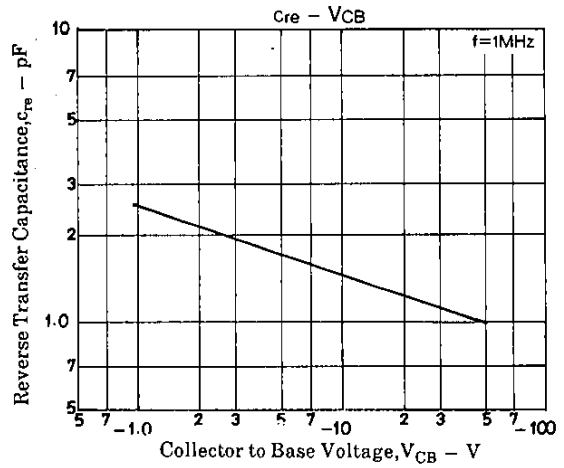
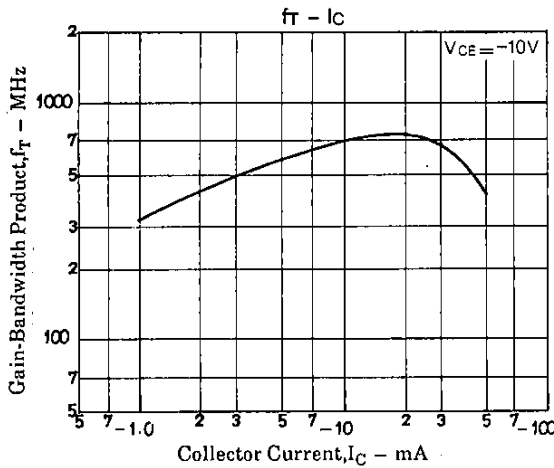
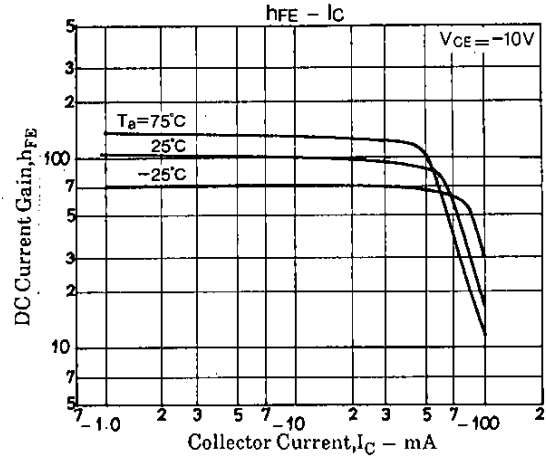
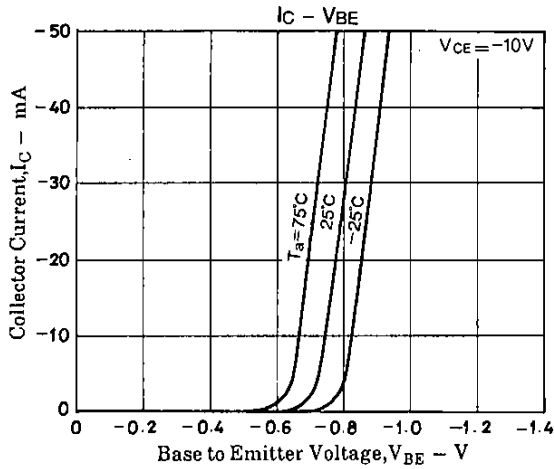
h_{FE} rank : D, E, F

Package Dimensions 2006A
(unit: mm)



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