Ordering number:EN3471

PNP Epitaxial Planar Silicon Transistor

2SA1433

High-Definition CRT Display Applications

Features

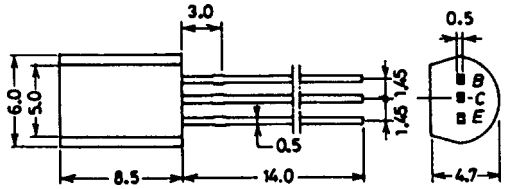
- High f_T (Gain-Bandwidth Product).
- Small reverse transfer capacitance (C_{re}=1.3pF).
- Adoption of FBET process.

Package Dimensions

unit:mm

2006A

[2SA1433]



EIAJ : SC-51
SANYO : MP

B : Base
C :Collector
E : Emitter

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		–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	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}=–40V, I_E=0			(–)0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=–3V, I_C=0			(–)1.0	μA
DC Current Gain	h_{FE}	V_{CE}=–10V, I_C=–10mA	60*		320*	
Gain-Bandwidth Product	f_T	V_{CE}=–10V, I_C=–10mA	350	700		MHz
Base-to-Collector Time Contact	r_{bb}, $'c_c$	V_{CE}=–10V, I_C=–10mA		8		
Output Capacitance	C_{ob}	V_{CB}=–10V, f=1MHz		1.7		pF
Reverse Transfer Capacitance	C_{re}	V_{CB}=–10V, f=1MHz		1.3		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=–20mA, I_B=–2mA			–0.6	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=–20mA, I_B=–2mA			–1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=–10μA, I_E=0	–70			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=–1mA, R_{BE}=∞	–60			V
Emitter-to-Base Breakdown Votage	$V_{(BR)EBO}$	I_E=–10μA, I_C=0	–4			V

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

60	D	120	100	E	200	160	F	320

h_{FE} rank : D, E, F

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