Ordering number: EN 3171

SANYO

No.3171

2SA1575/2SC4080

PNP/NPN Epitaxial Planar Silicon Transistors

High-Frequency Amp, Wide-Band Amp Applications

Features

- High f_T
- High breakdown voltage
- Small reverse transfer capacitance and excellent high-frequency characteristic
- Adoption of FBET process

( ) : 2SA1575

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V_{CBO}	(−)200	V
Collector to Emitter Voltage	V_{CEO}	(−)200	V
Emitter to Base Voltage	V_{EBO}	(−)4	V
Collector Current	I_C	(−)100	mA
Collector Current(Pulse)	I_{CP}	(−)200	mA
Collector Dissipation	P_C	500	mW
	Mounted on ceramic board (250mm² × 0.8mm)	1.3	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

Electrical Characteristics at Ta = 25°C

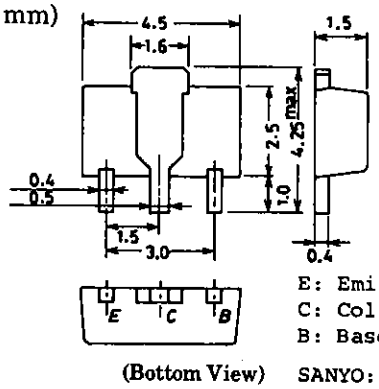
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=(−)150V, I_E=0			(−)0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=(−)2V, I_C=0			(−)1.0	μA
DC Current Gain	$h_{FE}(1)$	V_{CE}=(−)10V, I_C=(−)10mA	40※		320※	
	$h_{FE}(2)$	V_{CE}=(−)10V, I_C=(−)60mA	20			
Gain-Bandwidth Product	f_T	V_{CE}=(−)30V, I_C=(−)30mA		400		MHz
Output Capacitance	c_{ob}	V_{CB}=(−)30V, f=1MHz		(2.3)1.8		pF
Reverse Transfer Capacitance	c_{re}	V_{CB}=(−)30V, f=1MHz		(1.7)1.4		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=(−)20mA, I_B=(−)2mA			(−)1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=(−)20mA, I_B=(−)2mA			(−)1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=(−)10μA, I_E=0	(−)200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=(−)1mA, R_{BE}=∞	(−)200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=(−)100μA, I_C=0	(−)4			V

※ : The 2SA1575/2SC4080 are classified by 10mA h_{FE} as follows :

40 C 80	60 D 120	100 E 200	160 F 320

Marking 2SA1575 : AF
2SC4080 : CI
h_{FE} rank : C,D,E,F

Package Dimensions 2038
(unit : mm)



E: Emitter
C: Collector
B: Base

(Bottom View) SANYO: PCP

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