

SANYO

No.2526

2SA1474/2SC3780

PNP/NPN Epitaxial Planar Silicon Transistor

Ultrahigh-Definition CRT Display

Video Output Applications

Applications

- . Video output
- . Color TV chroma output
- . Wide-band amp

Features

- . High f_T (f_T typ=800MHz)
- . Small reverse transfer capacitance and excellent high frequency characteristic (C_{re} =3.0pF(NPN), 4.7pF(PNP))
- . Complementary PNP and NPN types
- . Adoption of FBET process

(): 2SA1474

Absolute Maximum Ratings at Ta=25°C

			unit
Collector-to-Base Voltage	V_{CBO}	(-)80	V
Collector-to-Emitter Voltage	V_{CEO}	(-)60	V
Emitter-to-Base Voltage	V_{EBO}	(-)4	V
Collector Current	I_C	(-)800	mA
Collector Current (Pulse)	I_{CP}	(-)1	A
Collector Dissipation	P_C	1.5	W
	$T_c=50^{\circ}C$	15	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

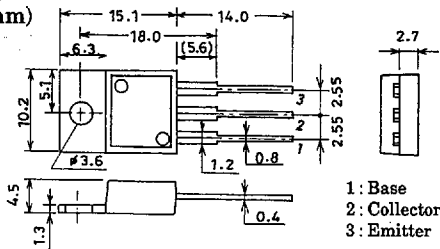
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)60V, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)2V, I_C=0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)10V, I_C=(-)50mA$	40*		320*	
	$h_{FE}(2)$	$V_{CE}=(-)10V, I_C=(-)400mA$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)100mA$		800		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)100mA, I_B=(-)10mA$			0.6	V
					(-0.8)	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)100mA, I_B=(-)10mA$			(-)1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10μA, I_E=0$	(-)80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=∞$	(-)60			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)100μA, I_C=0$	(-)4			V
Output Capacitance	C_{ob}	$V_{CB}=(-)30V, f=1MHz$		3.5(5.3)		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=(-)30V, f=1MHz$		3.0(4.7)		pF

*: The 2SA1474/2SC3780 are classified by 50mA h_{FE} as follows:

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

Package Dimensions 2010C

(unit: mm)



1: Base
2: Collector
3: Emitter

JEDEC: TO220AB
EIAJ : SC46

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