

Ordering number: EN 2526

<b>SANYO</b>	No.2526	<b>2SA1474/2SC3780</b>
		PNP/NPN Epitaxial Planar Type Silicon Transistors <b>VERY HIGH-DEFINITION CRT DISPLAY</b> <b>VIDEO OUTPUT APPLICATIONS</b>

**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
Peak Collector Current	$i_{cp}$	(-)1	A
Collector Dissipation	$P_C$	1.5	W
		$T_c=50^\circ C$	15
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C

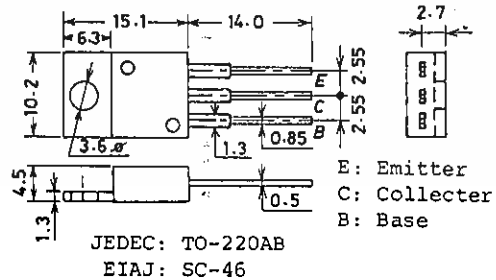
**Electrical Characteristics at Ta=25°C**

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=(-)60V, I_E=0$			(-)0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)2V, I_C=0$			(-)1.0	$\mu A$
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	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-)80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)60			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)100\mu A, I_C=0$	(-)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

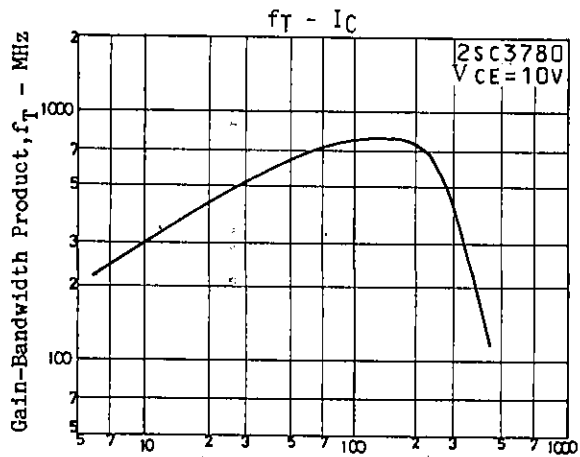
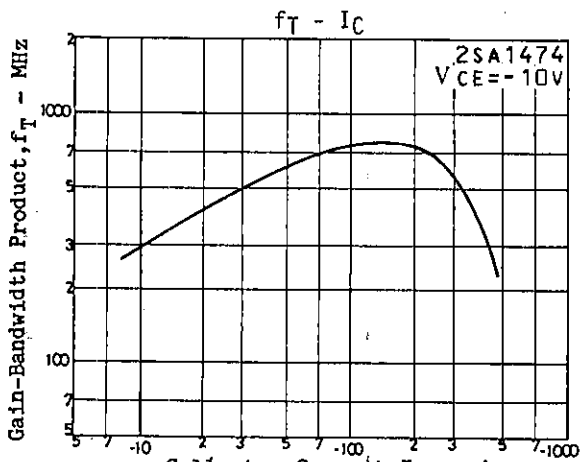
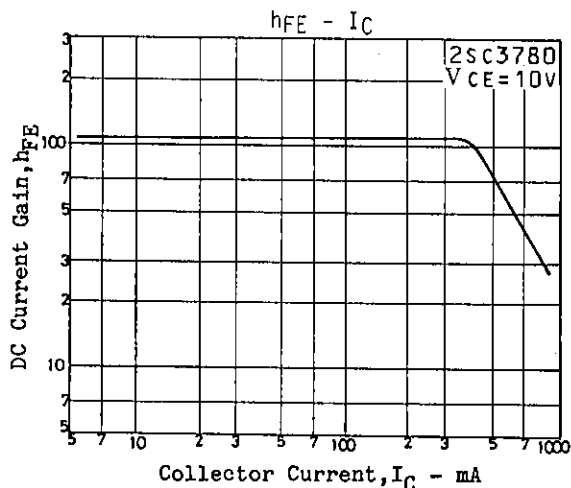
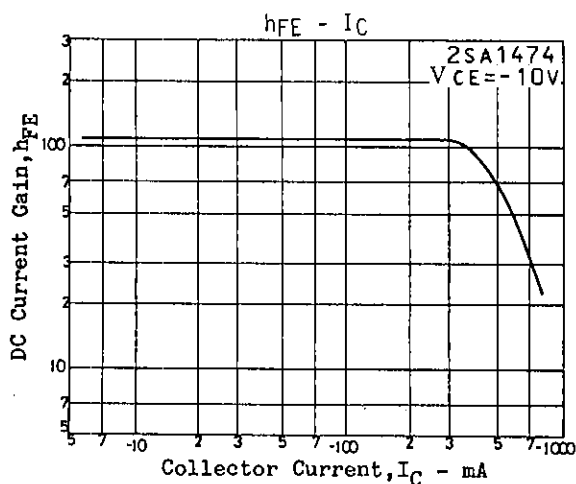
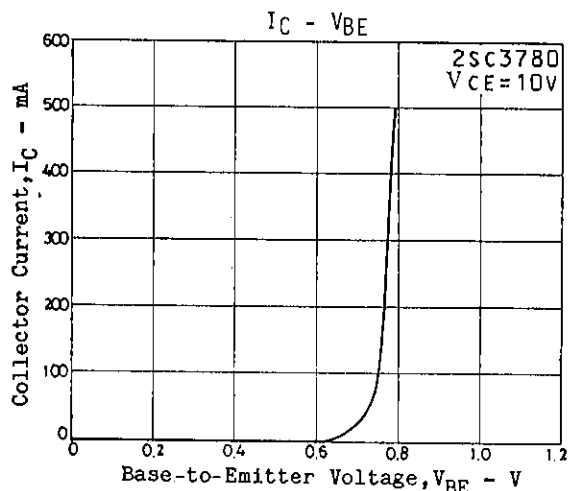
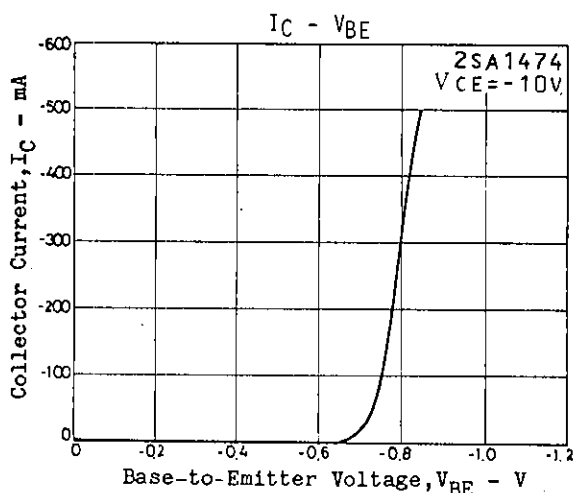
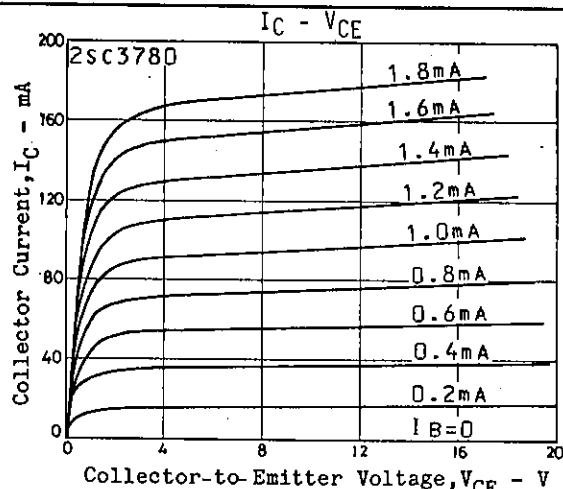
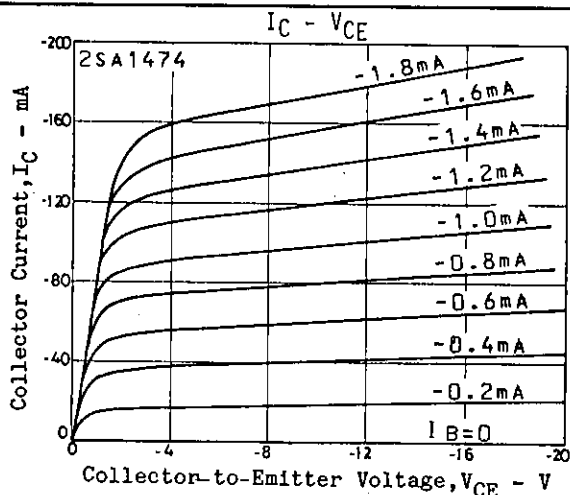
\*: The 2SA1474/2SC3780 are classified by 50mA  $h_{FE}$  as follows:

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

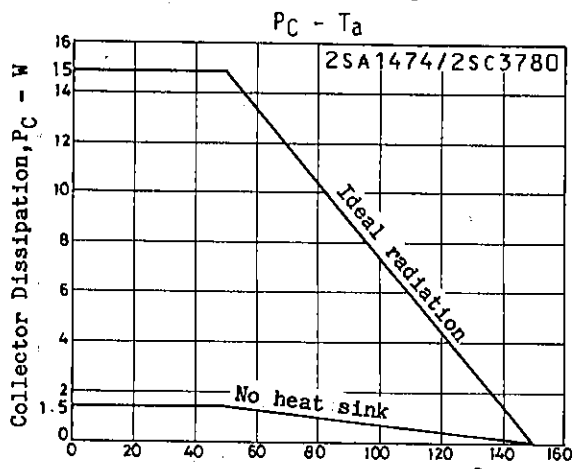
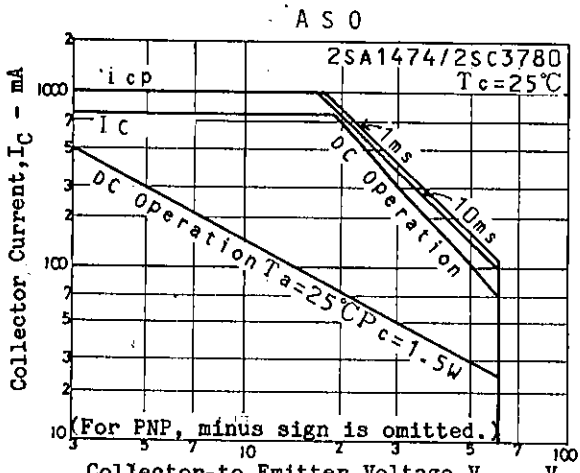
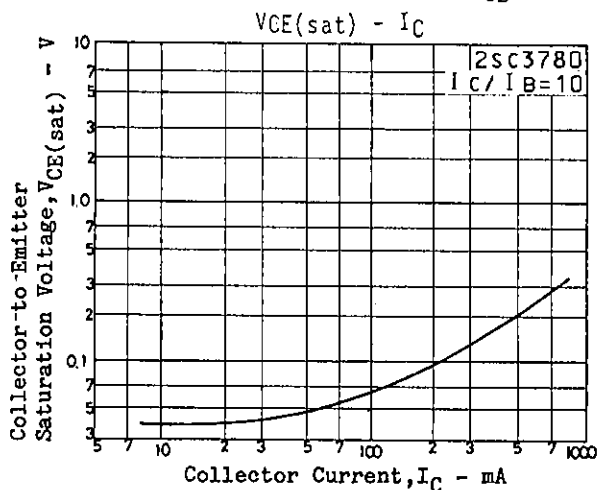
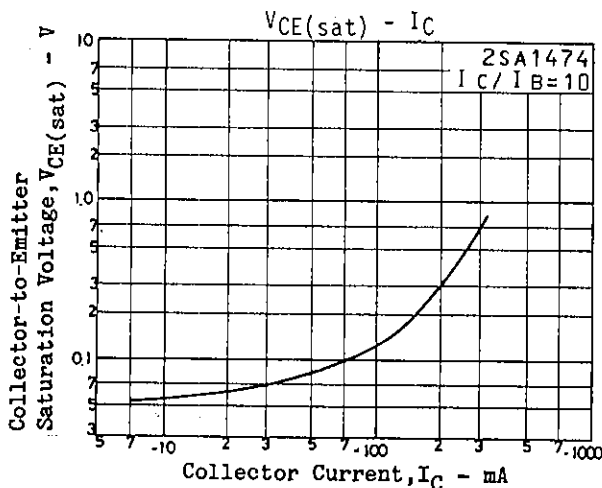
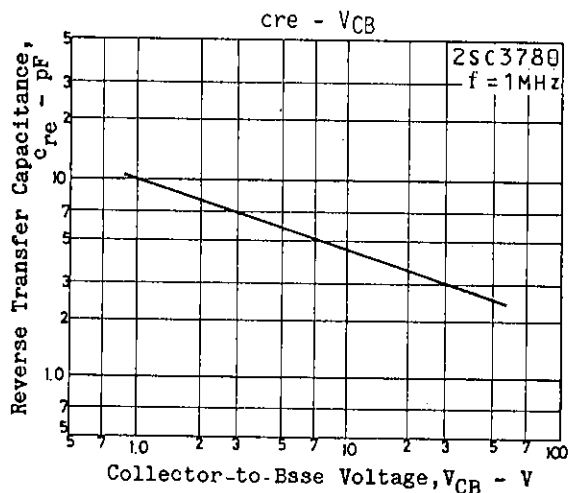
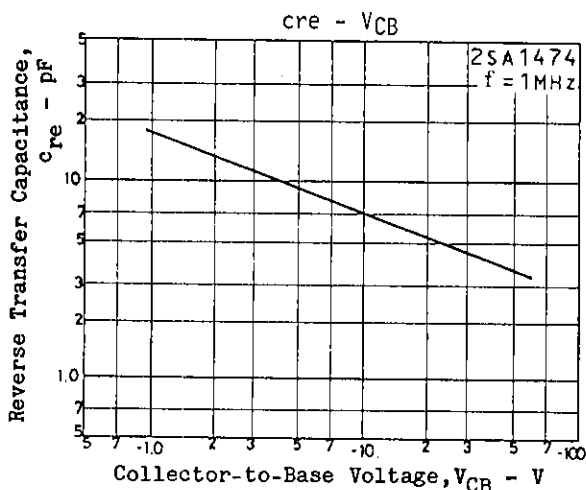
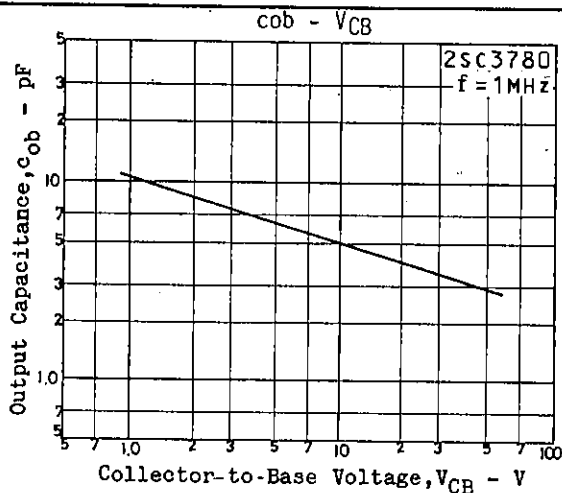
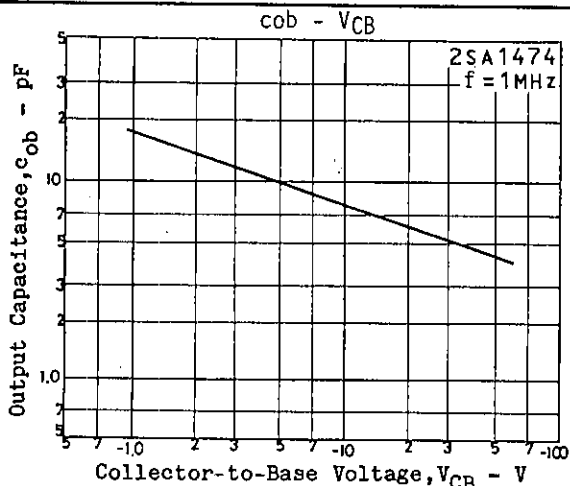
**Package Dimensions 2010A (unit: mm)**



2SA1474/2SC3780



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