

2SA 1266
2SA 1266 (L)

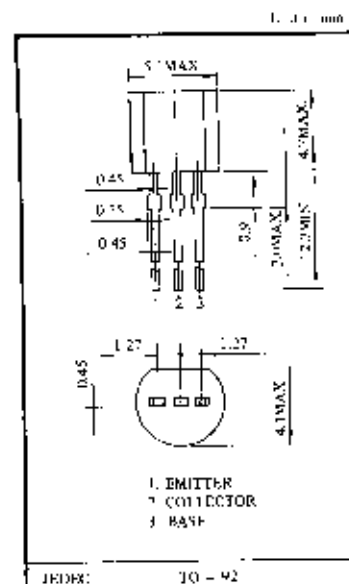
SILICON PNP TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

APPLICATIONS

- Low Frequency Amplifier
- Low Noise Amplifier

FEATURES

- Excellent h_{FE} Linearity, $h_{FE}(0.1mA)/h_{FE}(2mA) = 0.95$ (Typ.)
- Excellent Safe Operation Area
- Low Noise 2SA1266 NF = 1dB (TYP), 10dB (Max.)
2SA1266(L) NF = 0.2dB (TYP), 3dB (Max.)
- Complementary to the 2SC3198/2SC3198(L)



■ MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT	CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB}	-50	V	Emitter Current	I_E	150	mA
Collector-Emitter Voltage	V_{CE}	50	V	Collector Power Dissipation	P_C	400	mW
Emitter-Base Voltage	V_{EB}	-5	V	Junction Temperature	T_J	125	$^\circ\text{C}$
Collector Current	I_C	150	mA	Storage Temperature Range	T_{stg}	55~125	$^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut off Current	I_{CBO}	$V_{CB} = -50V, I_E = 0$	-	-	0.1	μA
Emitter Cut off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	0.1	μA
DC Current Gain(1)	$h_{FE(1)}$	$V_{CE} = -6V, I_C = -2mA$	70	-	400	-
DC Current Gain(2)	$h_{FE(2)}$	$V_{CE} = -6V, I_C = -150mA$	25	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_E = -10mA$	-	0.1	0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100mA, I_E = -10mA$	-	-	1.1	V
Transition Frequency	f_T	$V_{CE} = -10V, I_C = 1mA$	80	-	-	MHz
Output Capacitance	C_{ob}	$V_{CE} = -10V, I_C = 0, f = 1MHz$	-	4	7	pF
Base Spreading Resistance	r_{bb}	$V_{CE} = -10V, I_C = 1mA, f = 30MHz$	-	30	-	Ω
Noise Figure	2SA1266	NF $V_{CE} = -6V, I_C = 0.1mA$ $R_g = 10k\Omega, f = 1kHz$	-	1.0	10	dB
	2SA1266(L)		-	0.2	3	dB

■ NOTE: According to h_{FE} (1), Classified as follows

0	70~140	Y	120~240	GR	200~400
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