

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07219 D T-29-23

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA496

2SA505

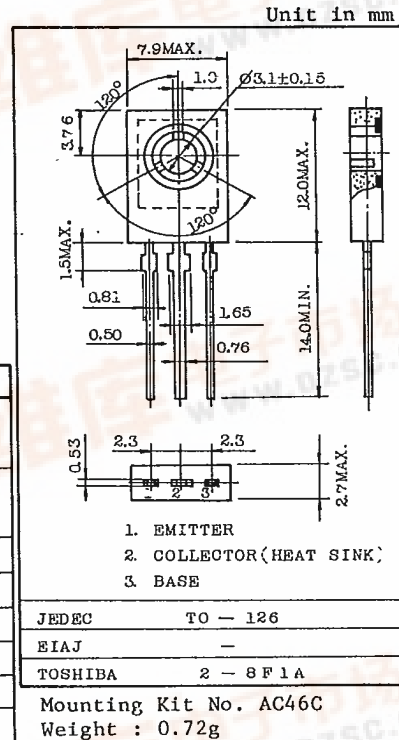
MEDIUM POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.32V$ (Typ.)
- Complementary to 2SC495 and 2SC496.

MAXIMUM RATINGS ($T_a = 25^\circ C$)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SA505	V_{CB0}	-60	V
	2SA496		-40	
Collector-Emitter Voltage	2SA505	V_{CE0}	-50	V
	2SA496		-30	
Emitter-Base Voltage		V_{EB0}	-5	V
Collector Current		I_C	-1	A
Emitter Current		I_E	1	A
Collector Power Dissipation		P_C	1	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$	-	-	-1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-1	μA
Collector-Emitter Breakdown Voltage	2SA505	$V_{(BR)CE0}$ $I_C = -10mA, I_B = 0$	-50	-	-	V
	2SA496		-30	-	-	
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	-5	-	-	V
DC Current Gain	(Note) $h_{FE(1)}$	$V_{CE} = -2V, I_C = -50mA$	40	-	240	-
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -800mA$	13	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$	-	-0.32	-0.8	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V, I_C = -500mA$	-	-	-1.3	V
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -10mA$	50	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	20	-	pF

Note: $h_{FE(1)}$ Classification R: 40 ~ 80 O: 70 ~ 140 Y: 120 ~ 240

TOSHIBA CORPORATION

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2SA496•2SA505

