

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2SA1483

HIGH FREQUENCY AMPLIFIER APPLICATIONS

VIDEO AMPLIFIER APPLICATIONS

HIGH SPEED SWITCHING APPLICATIONS

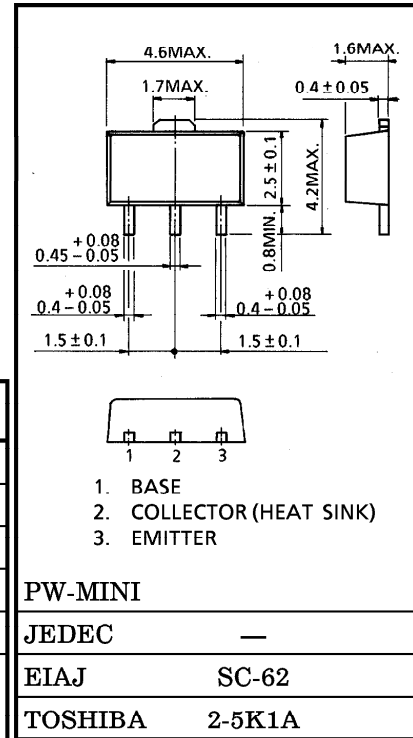
- High Transition Frequency :  $f_T = 200\text{MHz}$  (Typ.)
- Low Collector Output Capacitance :  $C_{ob} = 3.5\text{pF}$  (Typ.)
- Complementary to 2SC3803

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-60	V
Collector-Emitter Voltage	$V_{CEO}$	-45	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Continuous Collector Current	$I_C$	-200	mA
Continuous Base Current	$I_B$	-50	mA
Collector Power Dissipation	$P_C$	500	mW
	$P_C^*$	1000	
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$

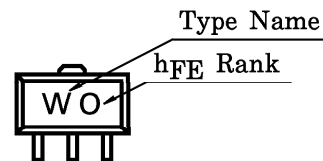
\* : Mounted on ceramic substrate ( $250\text{mm}^2 \times 0.8\text{t}$ )

Unit in mm



Weight : 0.05g

Marking



961001EAA2

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT				
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -45V, I_E = 0$	—	—	-0.1	$\mu A$				
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	$\mu A$				
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -1V, I_C = -10mA$	40	—	240					
	$h_{FE(2)}$	$V_{CE} = -3V, I_C = -200mA$	20	—	—					
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$	—	—	-0.3	V				
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100mA, I_B = -10mA$	—	—	-1.0	V				
Transition Frequency	$f_T$	$V_{CE} = -10V, I_C = -10mA$	100	200	—	MHz				
Input Impedance (Real Part)	$Re(h_{ie})$	$V_{CE} = -10V, I_E = 10mA, f = 200MHz$	—	—	120	$\Omega$				
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	3.5	5	pF				
Switching Time	Turn-on Time	$t_{on}$					—	40	—	ns
	Storage Time	$t_{stg}$					—	250	—	
	Fall Time	$t_f$					—	30	—	

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

