

TOSHIBA

2SA1483

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1483

HIGH FREQUENCY AMPLIFIER APPLICATIONS

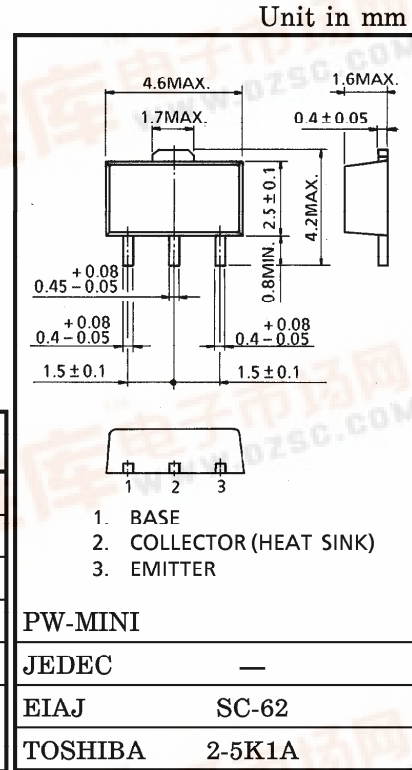
VIDEO AMPLIFIER APPLICATIONS

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

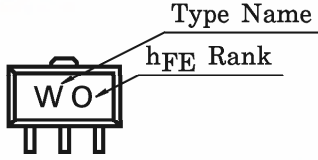
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-60	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EB0}	-5	V
Continuous Collector Current	I_C	-200	mA
Continuous Base Current	I_B	-50	mA
Collector Power Dissipation	P_C	500	mW
	P_{C^*}	1000	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



Weight : 0.05g

Marking

* : Mounted on ceramic substrate (250mm² × 0.8t)



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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT				
Collector Cut-off Current	ICBO	V _{CB} = -45V, I _E = 0	—	—	-0.1	μA				
Emitter Cut-off Current	IEBO	V _{EB} = -5V, I _C = 0	—	—	-0.1	μA				
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	Ω				
Collector Output Capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	3.5	5	pF				
Switching Time	Turn-on Time	t _{on}	<p>INPUT</p> <p>OUTPUT</p> <p>680Ω</p> <p>50Ω</p> <p>500Ω</p> <p>500Ω</p> <p>200Ω</p> <p>0</p> <p>-10V</p> <p>1μs</p> <p>V_{BB} = 3V</p> <p>V_{CC} = -12V</p> <p>DUTY CYCLE ≤ 2%</p>				—	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

