

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1735

POWER AMPLIFIER APPLICATIONS

POWER SWITCHING APPLICATIONS

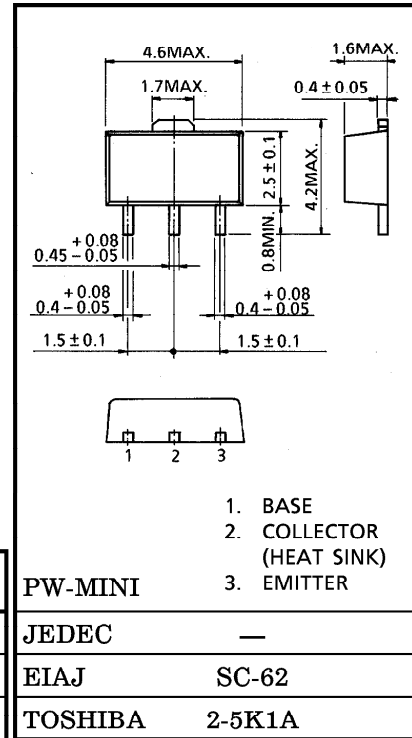
- Low Saturation Voltage : $V_{CE(sat)} = -0.5V$ (Max.)
($I_C = -500mA$)
- High Speed Switching Time: $t_{stg} = 0.25\mu s$ (Typ.)
- Small Flat Package
- $P_C = 1\sim 2W$ (Mounted on Ceramic Substrate)
- Complementary to 2SC4540

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-1	A
Base Current	I_B	-0.2	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation	P_C^*	1000	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

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

Unit in mm



Weight : 0.05g

Marking



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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	V _{CB} = -60V, I _E = 0	—	—	-0.1	μA
Emitter Cut-off Current		IEBO	V _{EB} = -6V, I _C = 0	—	—	-0.1	μA
Collector-Emitter Breakdown Voltage		V (BR) CEO	I _C = -10mA, I _B = 0	-50	—	—	V
DC Current Gain		h _{FE} (1)	V _{CE} = -2V, I _C = -100mA	120	—	400	
		h _{FE} (2)	V _{CE} = -2V, I _C = -700mA	40	—	—	
Collector-Emitter Saturation Voltage		V _{CE} (sat)	I _C = -500mA, I _B = -25mA	—	—	-0.5	V
Base-Emitter Saturation Voltage		V _{BE} (sat)	I _C = -500mA, I _B = -25mA	—	—	-1.2	V
Transition Frequency		f _T	V _{CE} = -2V, I _C = -100mA	—	100	—	MHz
Collector Output Capacitance		C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	16	—	pF
Switching Time	Turn-on Time	t _{on}	<p> $-I_{B1} = I_{B2} = 25\text{mA}$, DUTY CYCLE $\leq 1\%$, $V_{CC} = -25\text{V}$ </p>	—	0.1	—	μs
	Storage Time	t _{stg}		—	0.25	—	
	Fall Time	t _f		—	0.1	—	

