

2SC2873

SILICON NPN EPITAXIAL TYPE

POWER AMPLIFIER APPLICATIONS.
POWER SWITCHING APPLICATIONS.

FEATURES:

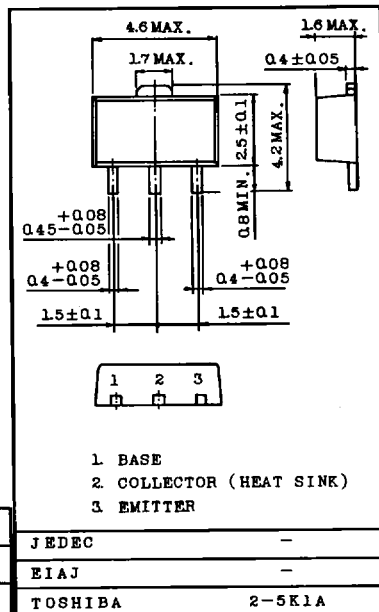
- Low Saturation Voltage
: $V_{CE(sat)} = 0.5V(\text{Max.})$ ($I_C = 1A$)
- High Speed Switching Time : $t_{stg} = 1.0\mu s(\text{Typ.})$
- $P_C = 1 \sim 2W$ (Mounted on Ceramic Substrate)
- Small Flat Package
- Complementary to 2SA1213

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CE0}	50	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	2	A
Base Current	I_B	0.4	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	$^\circ C$

P_C^* : 2SC2873 mounted on ceramic substrate ($250\text{mm}^2 \times 0.8t$)

Unit in mm



Weight : 0.052g

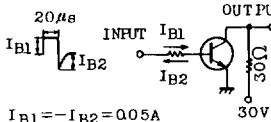
Marking

Type Name

hFE Rank



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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=50\text{V}, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	-	0.1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10\text{mA}, I_E=0$	50	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note 2)		$V_{CE}=2\text{V}, I_C=0.5\text{A}$ (Note 1)	70	-	240	
	$h_{FE(2)}$		$V_{CE}=2\text{V}, I_C=2.0\text{A}$ (Note 1)	20	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=1\text{A}, I_B=0.05\text{A}$ (Note 1)	-	-	0.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=1\text{A}, I_B=0.05\text{A}$ (Note 1)	-	-	1.2	V
Transition Frequency		f_T	$V_{CE}=2\text{V}, I_C=0.5\text{A}$	-	120	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	30	-	pF
Switching Time	Turn-on Time	t_{on}	 20μs INPUT I_{B1} I_{B2} OUTPUT 30Ω 30V $I_{B1}=-I_{B2}=0.05\text{A}$ DUTY CYCLE $\leq 1\%$	-	0.1	-	μs
	Storage Time	t_{stg}		-	1.0	-	
	Fall Time	t_f		-	0.1	-	

Note 1 : Pulse width $\leq 300\mu\text{s}$, Duty Cycle $\leq 1\%$ 2 : h_{FE} Classification O : 70~140, Y : 120~240

