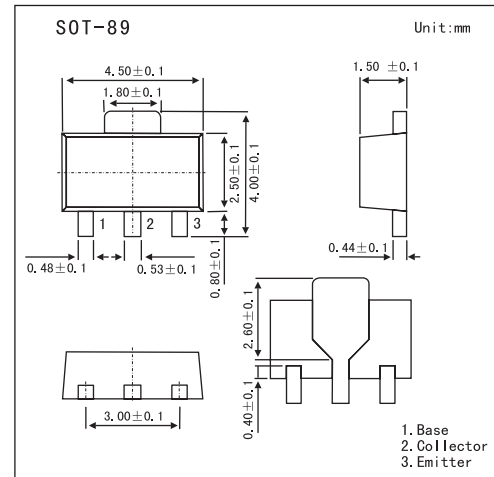


Silicon NPN Epitaxial Type

2SC2873

■ Features

- Low saturation voltage: $V_{CE(sat)} = 0.5\text{ V (max)}$ ($I_C = 1\text{ A}$).
- High speed switching time: $t_{stg} = 1.0\ \mu\text{ s (typ.)}$.
- Small flat package.
- $P_C = 1.0\text{ to }2.0\text{ W}$ (Mounted on Ceramic Substrate)

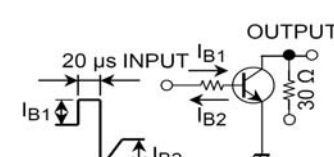
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	2	A
Base current	I_B	0.4	A
Collector power dissipation	P_C	500	mW
	P_C^{*1}	1000	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

2SC2873

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector-emitter breakdown voltage	V _{CEO}	I _C = 10 mA, I _B = 0	50			V	
Collector cut-off current	I _{CBO}	V _{CB} = 50 V, I _E = 0			0.1	μA	
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0			0.1	μA	
DC current gain	h _{FE}	V _{CE} = 2 V, I _C = 0.5 A	70		240		
		V _{CE} = 2 V, I _C = 2.0 A	20				
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 1 A, I _B = 0.05 A			0.5	V	
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 1 A, I _B = 0.05 A			1.2	V	
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz		30		pF	
Turn-on time	t _{on}			0.1		μs	
Storage time	t _{stg}				1.0		μs
Fall time	t _f		I _{B1} = -I _{B2} = 0.05 A, DUTY CYCLE ≤ 1%		0.1		μs
Transition frequency	f _T	V _{CE} = 2 V, I _C = 0.5 A		120		MHz	

■ hFE Classification

Marking	MO	MY
Rank	O	Y
hFE	70~140	120~240