

# 2SC4500(L)/(S)

Silicon NPN Epitaxial

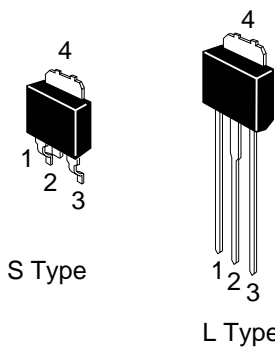
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## Application

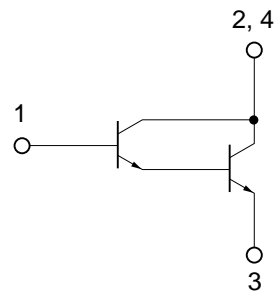
Low frequency amplifier

## Outline

DPAK



- 1. Base
- 2. Collector
- 3. Emitter
- 4. Collector



## 2SC4500(L)/(S)

### Absolute Maximum Ratings (Ta = 25°C)

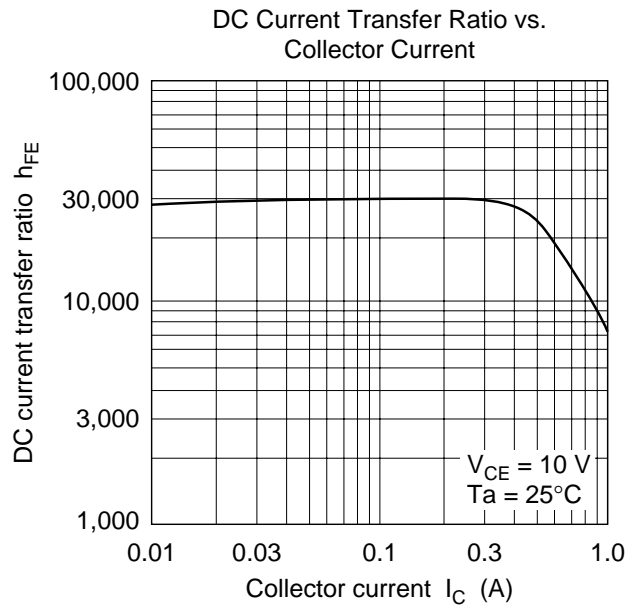
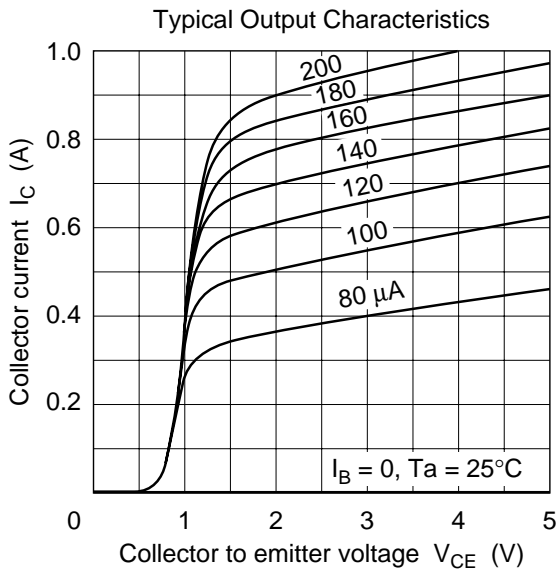
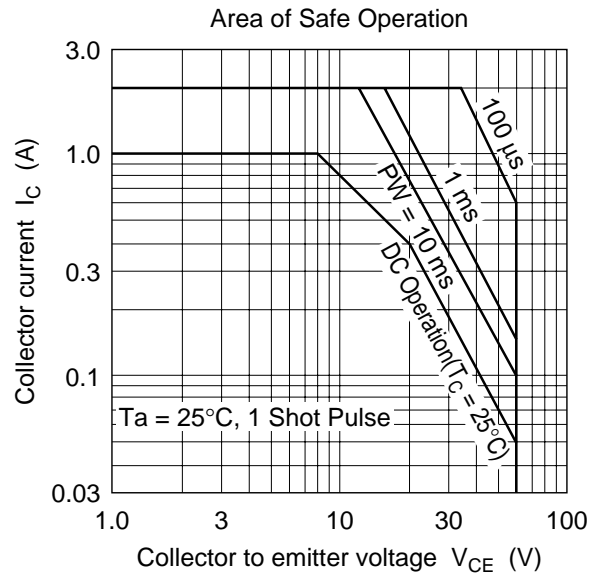
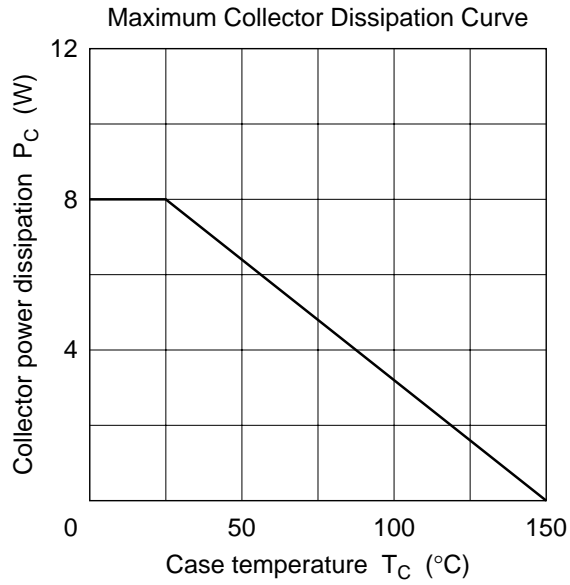
Item	Symbol	Rated	Unit
Collector to base voltage	$V_{CBO}$	60	V
Collector to emitter voltage	$V_{CEO}$	60	V
Emitter to base voltage	$V_{EBO}$	7	V
Collector current	$I_C$	1	A
Collector peak current	$I_{C(peak)}$	2	A
Collector power dissipation	$P_C$	0.8	W
	$P_C^{*1}$	8	
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

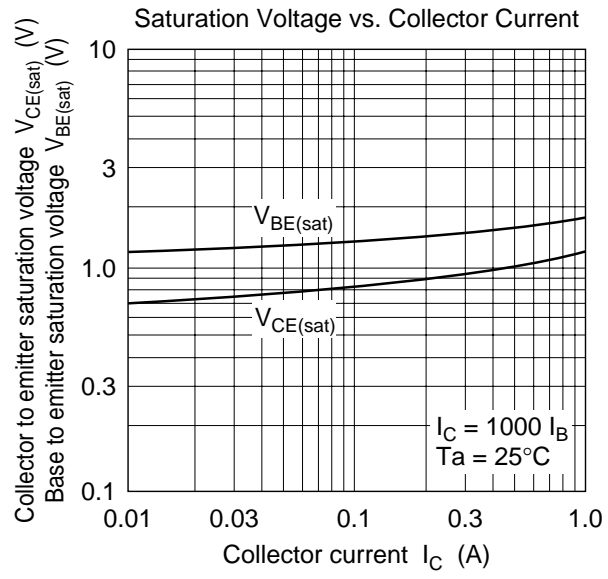
Note: 1. Value at  $T_C = 25^\circ\text{C}$ .

### Electrical Characteristics (Ta = 25°C)

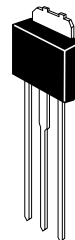
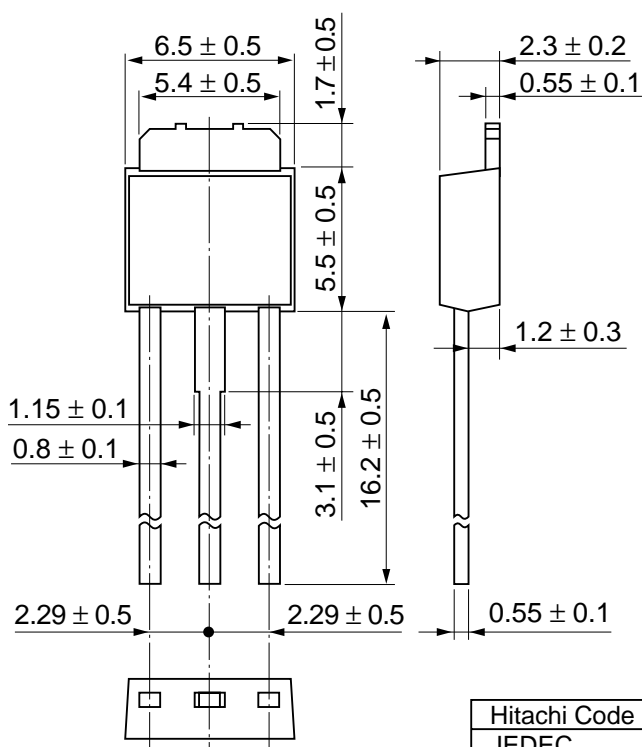
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	60	—	—	V	$I_C = 1\text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	7	—	—	V	$I_E = 0.1\text{ mA}, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	10	$\mu\text{A}$	$V_{CB} = 60\text{ V}, I_E = 0$
DC current transfer ratio	$h_{FE}$	2000	—	—		$V_{CE} = 10\text{ V}, I_C = 500\text{ mA}^{*1}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.5	V	$I_C = 500\text{ mA}, I_B = 0.5\text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	2.0	V	$I_C = 500\text{ mA}, I_B = 0.5\text{ mA}^{*1}$
Turn on time	$t_{on}$	—	100	—	ns	$V_{CC} = 12\text{ V}, I_C = 250\text{ mA},$
Turn off time	$t_{off}$	—	600	—	ns	$I_{B1} = -I_{B2} = 5\text{ mA}$

Note: 1. Pulse Test.





Unit: mm



Hitachi Code	DPAK (L)-(1)
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.42 g

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