

2SC4499(L/S)

**Silicon NPN Triple Diffused
High Speed and High Voltage Switching**

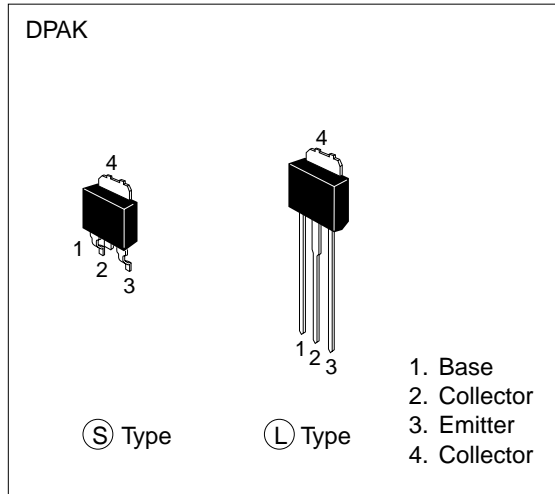
Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	500	V
Collector to emitter voltage	V _{CEO}	400	V
Emitter to base voltage	V _{EBO}	10	V
Collector current	I _C	0.5	A
Collector peak current	i _{C(peak)}	1.0	A
Collector power dissipation	P _C	0.75	W
	P _C ^{*1}	10	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

Note: 1. Value at T_C = 25°C.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to emitter sustain voltage	V _{CEO(sus)}	400	—	—	V	I _C = 0.1 A, R _{BE} = ∞ L = 100 mH
Emitter to base breakdown voltage	V _{(BR)EBO}	10	—	—	V	I _E = 10 mA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	20	μA	V _{CB} = 400 V, I _E = 0
	I _{CEO}	—	—	50		V _{CE} = 350 V, R _{BE} = ∞
DC current transfer ratio	h _{FE1}	12	—	—		V _{CE} = 5 V, I _C = 0.25 A ^{*1}
	h _{FE2}	5	—	—		V _{CE} = 5 V, I _C = 0.5 A ^{*1}
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	1.0	V	I _C = 0.25 A, I _B = 0.05 A ^{*1}
Base to emitter saturation voltage	V _{BE(sat)}	—	—	1.5	V	I _C = 0.25 A, I _B = 0.05 A ^{*1}



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

Item	Symbol	Min	Typ	Max	Unit	Test condition
Turn on time	ton	—	—	1.0	μs	IC = 0.5 A,
Storage time	tstg	—	—	2.0	μs	IB1 = -IB2 = 0.1 A,
Fall time	tf	—	—	1.0	μs	VCC ≈ 150 V

Note: 1. Pulse Test.

