

2SD1114K

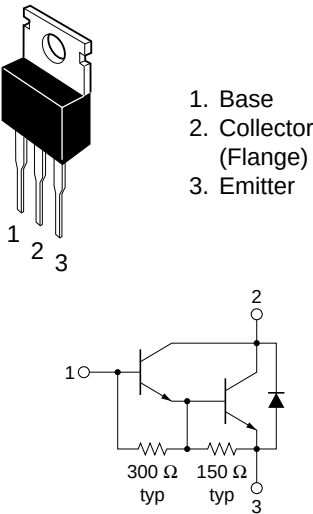
Silicon NPN Triple Diffused
High Voltage Switching, Igniter

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	400	V
Collector to emitter voltage	V _{CEO}	300	V
Emitter to base voltage	V _{EBO}	7	V
Collector current	I _C	6	A
Collector peak current	i _{C(peak)}	10	A
Collector power dissipation	P _C ^{*1}	50	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 to +150	°C

Note: 1. Value at T_C = 25°C.

TO-220AB



Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to base breakdown voltage	V _{(BR)CBO}	400	—	—	V	I _C = 0.1 mA, I _E = 0
Collector to emitter sustain voltage	V _{CEO(sus)}	300	—	—	V	I _C = 4 A, PW = 50 μs, f = 50 Hz, L = 10 mH
Emitter to base breakdown voltage	V _{(BR)EBO}	7	—	—	V	I _E = 50 mA, I _C = 0
Collector cutoff current	I _{CEO}	—	—	100	μA	V _{CE} = 300 V, R _{BE} = ∞
DC current transfer ratio	h _{FE}	500	—	—		V _{CE} = 2 V, I _C = 4 A ^{*1}
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	1.5	V	I _C = 4 A, I _B = 40 mA ^{*1}
Base to emitter saturation voltage	V _{BE(sat)}	—	—	2.0	V	
Turn on time	t _{on}	—	2.0	—	μs	I _C = 4 A, I _{B1} = −I _{B2} = 40 mA
Turn off time	t _{off}	—	23	—	μs	

Note: 1. Pulse Test.

See characteristics curves of 2SD991K.

2SD1114(K)

