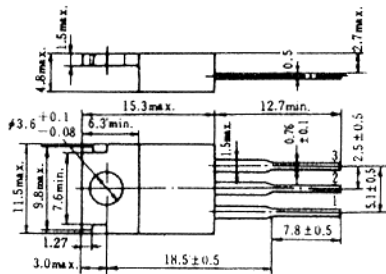
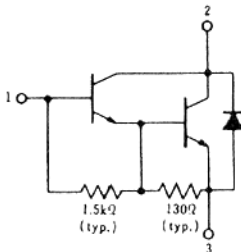


2SD1127(K)

SILICON NPN TRIPLE DIFFUSED
POWER SWITCHING



1. Base
2. Collector (Flange)
3. Emitter
(Dimensions in mm)



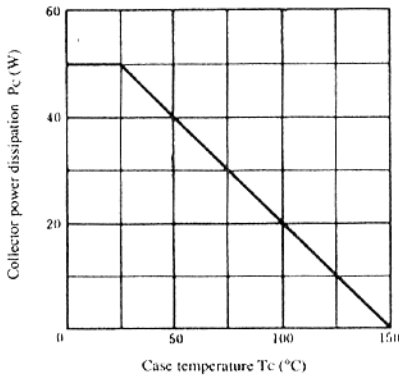
(JEDEC TO-220AB)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD1127(K)	Unit
Collector to base voltage	V _{CB0}	120	V
Collector to emitter voltage	V _{CEO}	120	V
Emitter to base voltage	V _{EB0}	7	V
Collector current	I _C	10	A
Collector peak current	i _{C(peak)}	15	A
Collector power dissipation	P _C *	50	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C
C to E diode forward current	I _D *	10	A

* Value at T_C = 25°C.

MAXIMUM CHANNEL DISSIPATION
CURVE



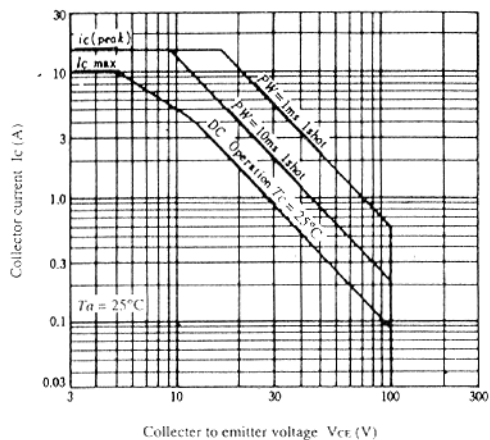
■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to emitter sustain voltage	V _{CEO(sus)}	I _C = 200mA, R _{BE} = ∞	120	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 200mA, I _C = 0	7	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = 120V, I _E = 0	—	—	100	μA
DC current transfer ratio	h _{FE}	V _{CE} = 2V, I _C = 10A*	1000	—	—	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10A, I _B = 25mA*	—	—	1.5	V
Base to emitter saturation voltage	V _{BE(sat)}		—	—	2.0	V
Turn on time	t _{on}	I _C = 5A, I _{B1} = -I _{B2} = 10mA	—	0.8	—	μs
Turn off time	t _{off}		—	8.0	—	μs

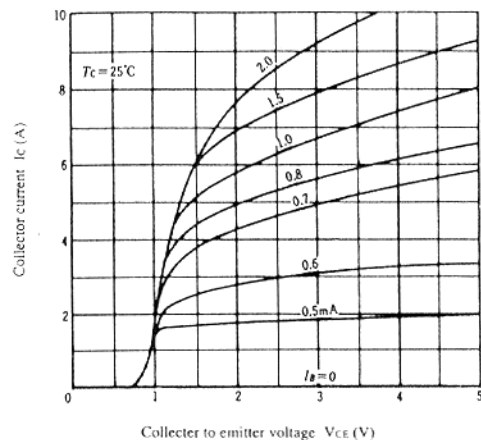
* Pulse Test.

2SD1127K

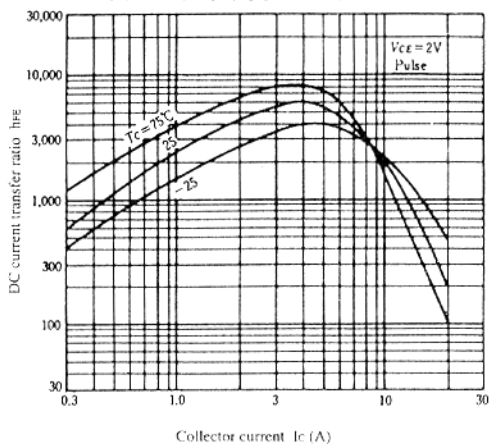
AREA OF SAFE OPERATION



TYPICAL OUTPUT CHARACTERISTICS



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT

