

DESCRIPTION

2SC3728 is a silicon NPN epitaxial type transistor. There is a built-in zener diode between collector to emitter.

FEATURE

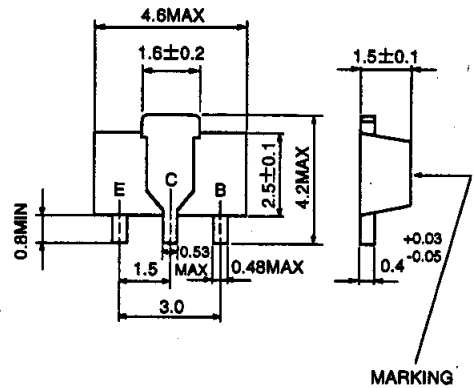
- High h_{FE} $h_{FE}=150$ to 800
- High collector current ($I_C=2A$)
- Low collector to emitter saturation voltage
 $V_{CE(sat)}=0.17V$ typ (@ $I_C=1A, I_B=50mA$)
- High collector dissipation $P_C=500mW$
- Small package for mounting

APPLICATION

Camera shutter, solenoid drive circuit.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR
B : BASE

EIAJ : SC-82
JEDEC : -

Note)

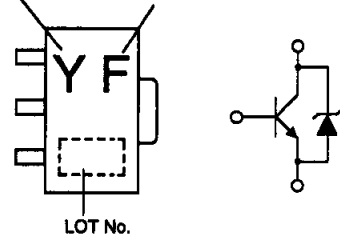
The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	20	V
V _{EB0}	Emitter to Base voltage	6	V
V _{CE0}	Collector to Emitter voltage	12	V
I _{CM}	Peak Collector current	3	A
I _C	Collector current	2	A
P _C	Collector dissipation(Ta=25°C)	500	mW
T _J	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55 to +150	°C

MARKING

TYPE NAME hFE ITEM



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CBO}	C to B break down voltage	I _C =10 μA, I _E =0	20			V
V _{(BR)EBO}	E to B break down voltage	I _E =10 μA, I _C =0	6			V
V _{(BR)CEO}	C to E break down voltage	I _C =5mA, R _{BE} =∞	12	14	16	V
I _{CB0}	Collector cut off current	V _{CB} =16V, I _E =0			0.1	μA
I _{EB0}	Emitter cut off current	V _{EB} =4V, I _C =0			0.1	μA
h _{FE} *	DC forward current gain	V _{CE} =4V, I _C =100mA	150	350	800	—
V _{CE(sat)}	C to E saturation voltage	I _C =1A, I _B =50mA		0.2	0.35	V
f _T	Gain band width product	V _{CE} =2V, I _E =-10mA	40	80		MHz
C _{ob}	Collector output capacitance	V _{CB} =10V, I _E =0, f=1MHz		28		pF

* : It shows hFE classification in right table.

Marking	YE	YF	YG
hFE	150 to 300	250 to 500	400 to 800

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