

DESCRIPTION

2SC4356 is a silicon NPN epitaxial type transistor designed relay drive application.

FEATURE

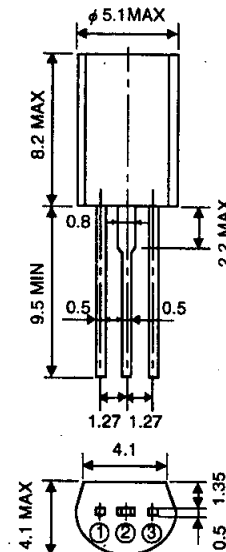
- High voltage $V_{CE0}=60V$
- High collector current $I_C=2A$
- Low $V_{CE(sat)}$ $V_{CE(sat)}=0.5V_{max}$ ($@I_C=1A, I_B=50mA$)
- High collector dissipation $P_C=900mW$

APPLICATION

Audio machine, VCR, relay drive.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

- ① : EMITTER
 - ② : COLLECTOR
 - ③ : BASE
- EIAJ : —
JEDEC : —

Note)
The dimension without tolerance represent central value.

MAXIMUM RATINGS ($T_a=25^{\circ}C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	60	V
V_{EBO}	Emitter to Base voltage	6	V
V_{CEO}	Collector to Emitter voltage	60	V
I_{CM}	Peak Collector current	3	A
I_C	Collector current	2	A
P_C	Collector dissipation($T_a=25^{\circ}C$)	900	mW
T_j	Junction temperature	+150	$^{\circ}C$
T_{stg}	Storage temperature	-55 to +150	$^{\circ}C$

ELECTRIAL CHARACTERISTICS ($T_a=25^{\circ}C$)

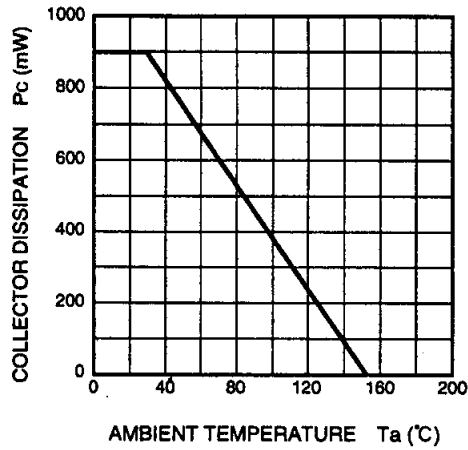
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A, I_E=0$	60			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A, I_C=0$	6			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=2mA, R_{BE}=\infty$	60			V
I_{CBO}	Collector cut off current	$V_{CB}=50V, I_E=0$			0.2	μA
I_{EBO}	Emitter cut off current	$V_{EB}=4V, I_C=0$			0.2	μA
$h_{FE} *$	DC forward current gain	$V_{CE}=4V, I_C=100mA$	55		300	—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=1A, I_B=50mA$		0.2	0.5	V
f_T	Gain band width product	$V_{CE}=2V, I_E=-10mA$		80		MHz
C_{ob}	Collector output capacitance	$V_{CB}=10V, I_E=0, f=1MHz$		18		pF

* : It shows hFE classification in right table.

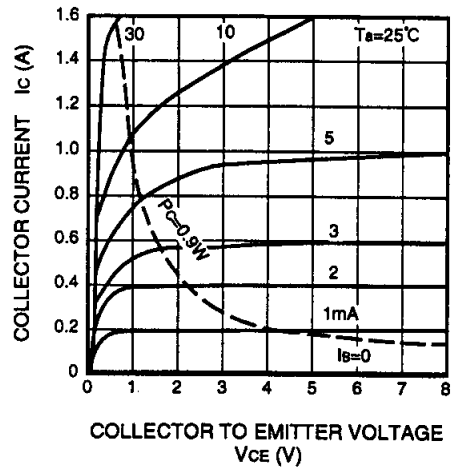
Item	C	D	E
hFE	55 to 110	90 to 180	150 to 300

TYPICAL CHARACTERISTICS

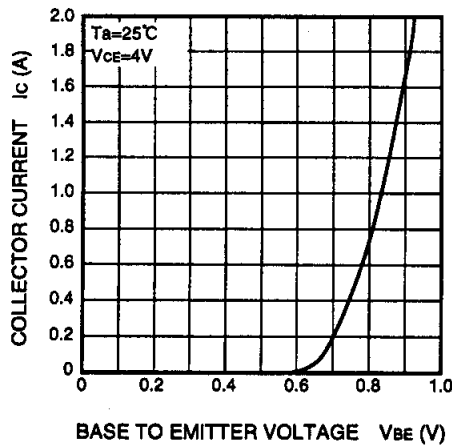
**COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE**



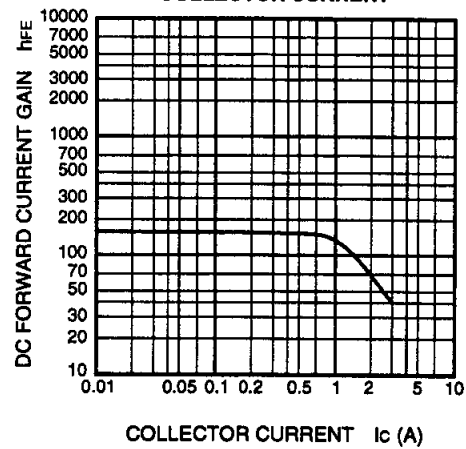
COMMON EMITTER OUTPUT



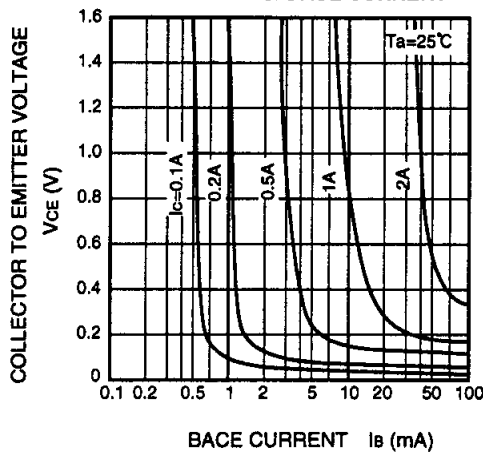
COMMON EMITTER TRANSFER



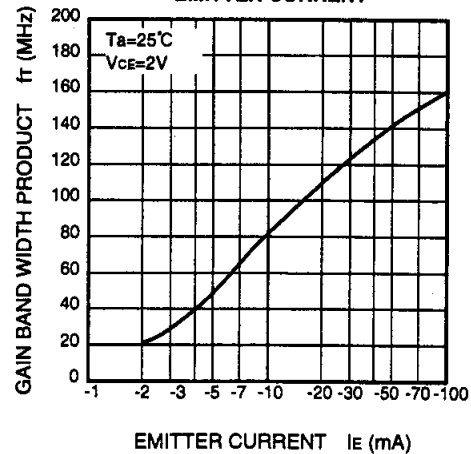
**DC FORWARD CURRENT GAIN VS.
COLLECTOR CURRENT**

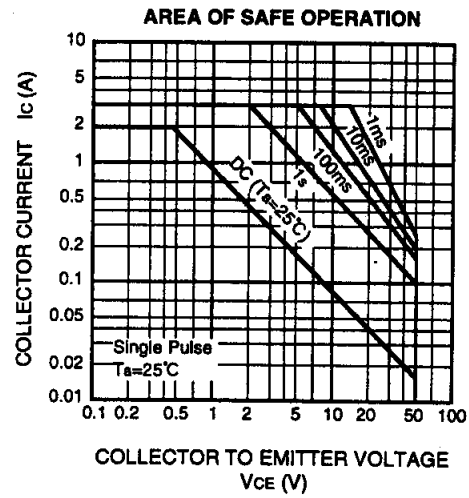
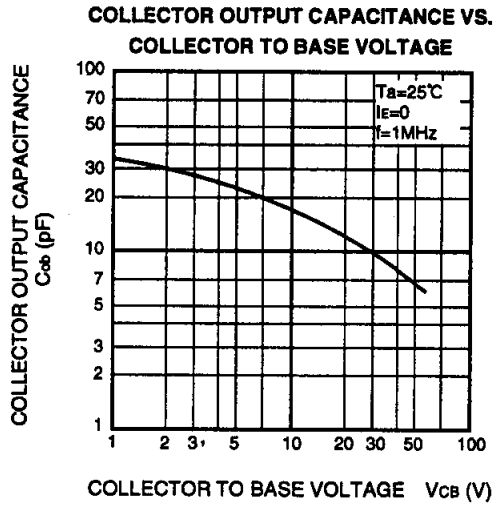


**COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. BASE CURRENT**



**GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT**







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