

**DESCRIPTION**

2SC3444 is a silicon NPN epitaxial type transistor designed for relay drive, power supply application.  
Complementary with 2SA1364.

**FEATURE**

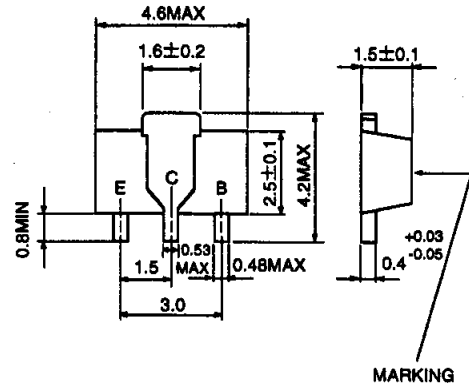
- High voltage  $V_{CE0}=60V$
- High collector current ( $I_C=1A$ )
- Low collector to emitter saturation voltage  
 $V_{CE(sat)}=0.11V$  typ (@  $I_C=500mA, I_B=25mA$ )
- High collector dissipation  $P_C=500mW$
- Small package for mounting

**APPLICATION**

Audio machine, VCR, relay drive, power supply.

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

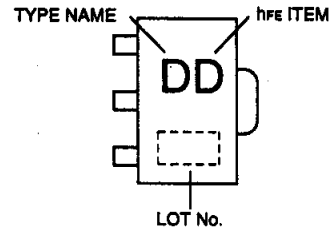
E : EMITTER  
C : COLLECTOR EIAJ : SC-62  
B : BASE JEDEC : -

Note)  
The dimension without tolerance represent central value.

**MAXIMUM RATINGS (Ta=25°C)**

Symbol	Parameter	Ratings	Unit
$V_{CB0}$	Collector to Base voltage	60	V
$V_{EB0}$	Emitter to Base voltage	6	V
$V_{CE0}$	Collector to Emitter voltage	60	V
$I_{CM}$	Peak collector current	2	A
$I_C$	Collector current	1	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**



**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A, I_E=0$	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	$\mu A$
$I_{EBO}$	Emitter cut off current	$V_{EB}=4V, I_C=0$			0.2	$\mu A$
$h_{FE}^*$	DC forward current gain	$V_{CE}=4V, I_C=100mA$	55		300	—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=500mA, I_B=25mA$		0.11	0.3	V
$f_T$	Gain band width product	$V_{CE}=2V, I_E=-10mA$		80		MHz
$C_{ob}$	Collector output capacitance	$V_{CB}=10V, I_E=0, f=1MHz$		14		pF

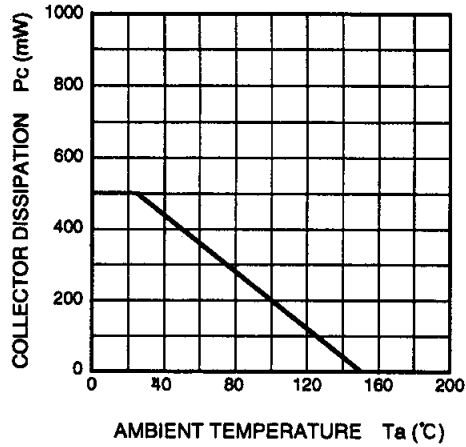
\* : It shows hFE classification in right table.

Marking	DC	DD	DE
hFE	55 to 110	90 to 180	150 to 300

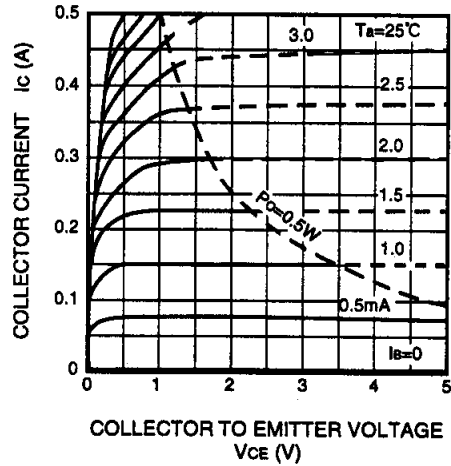
FOR LOW FREQUENCY POWER AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE

TYPICAL CHARACTERISTICS

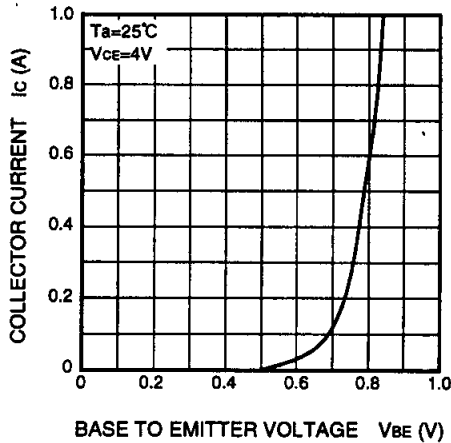
COLLECTOR DISSIPATION VS.  
AMBIENT TEMPERATURE



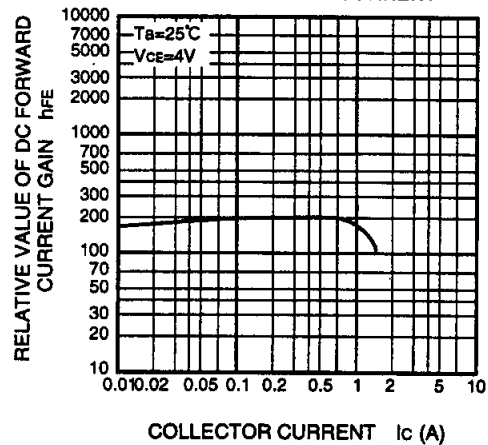
COMMON EMITTER OUTPUT



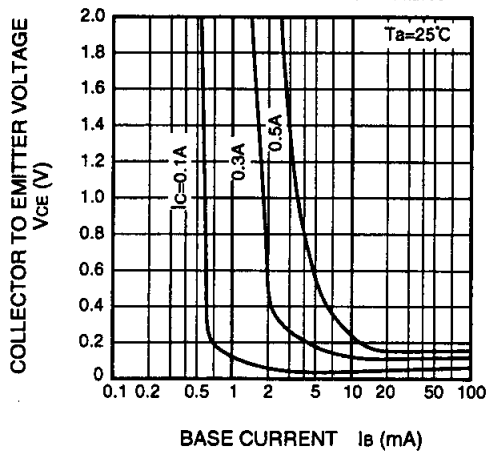
COMMON EMITTER TRANSFER



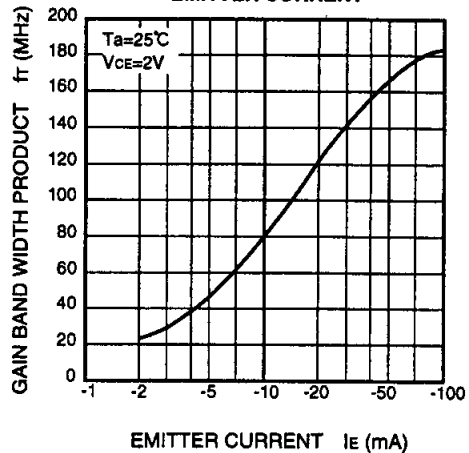
DC FORWARD CURRENT GAIN  
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION  
VOLTAGE VS. BASE CURRENT

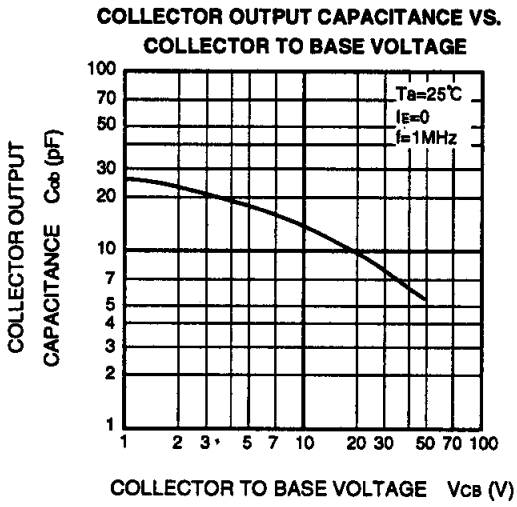


GAIN BAND WIDTH PRODUCT VS.  
EMITTER CURRENT



FOR LOW FREQUENCY POWER AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE

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