2SC3444

FOR HIGH FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

DESCRIPTION

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

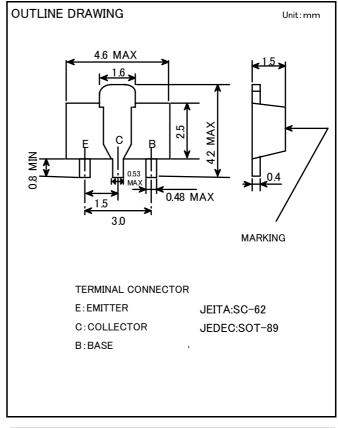
Complementary with 2SA1364.

FEATURE

- High voltage V_{CEO}=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)
- ullet High collector dissipation P_C=500mW
- Small package for mounting

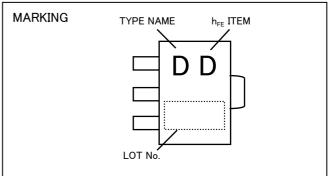
APPLICATION

Audio machine, VTR, relay drive, power supply



MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit	
V _{CBO}	Collector to Base voltage	60	٧	
V _{EBO}	Emitter to Base voltage	6	V	
V _{CEO}	Collector to Emitter voltage	60	٧	
I c	Collector current	1	Α	
I _{CM}	Peak collector current	2	Α	
P _c	Collector dissipation	500	mW	
T _j	Junction temperature	+150	°C	
T_{stg}	T _{stg} Storage temperature -5		°C	



ELECTRICAL CHARACTERISTICS(Ta=25°C)

Symbol	Parameter	T	Limits			11.5
		Test conditions	Min	Тур	Max	Unit
V _{(BR)CBO}	C to B break down voltage	$I_{\rm C}$ =10 μ A , $I_{\rm E}$ =0	60	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_{E}=10 \mu A, I_{C}=0$	6	_	_	٧
$V_{(BR)CEO}$	C to E break down voltage	I _C =2mA ,R _{BE} =∞	60	_	_	٧
I_{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	_	-	0.2	μΑ
I _{EBO}	Emitter cut off current	V _{EB} =4V, I _C =0	_	-	0.2	μΑ
h _{FE} *	DC forward current gain	V _{CE} =4V, I _C =100mA	55	-	300	_
$V_{\text{CE}(\text{sat})}$	C to E Saturation Voltage	I _C =500mA ,I _B =25mA	_	0.11	0.3	٧
f _T	Gain bandwidth product	V _{CE} =2V, I _E =-10mA	_	80	-	MHz
Cob	Collector output capacitance	V _{CB} =10V, I _E =0, f=1MHz	-	14	_	pF

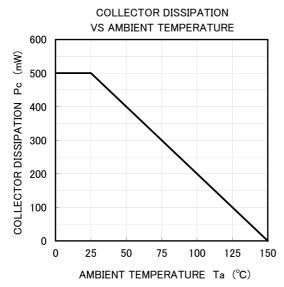
^{*} It shows h_{FE} classification in right table.

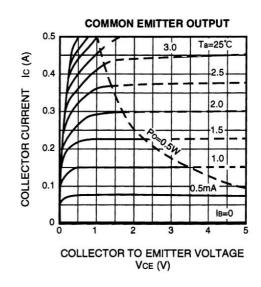
Marking	DC	DD	DE
h _{FE}	55 ~ 110	90 ~ 180	150~300

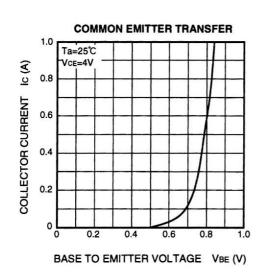
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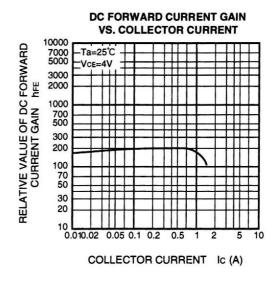
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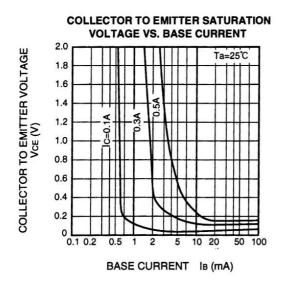
TYPICAL CHARACTERISTICS

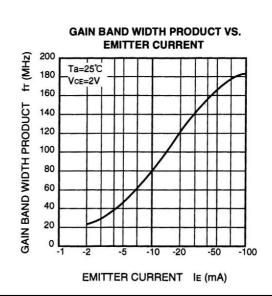












⟨SMALL-SIGNAL TRANSISTOR⟩

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FOR HIGH FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE 100 _Ta=25℃ 70 IE=0 50 f=1MHz CAPACITANCE Cob (pF) COLLECTOR OUTPUT 30 20 10 7 3 2

COLLECTOR TO BASE VOLTAGE VCB (V)



6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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