

2SC3443

FOR HIGH CURRENT DRIVE APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC3443 is a silicon NPN epitaxial type transistor designed with high collector current and high collector dissipation.

Complementary with 2SA1363.

FEATURE

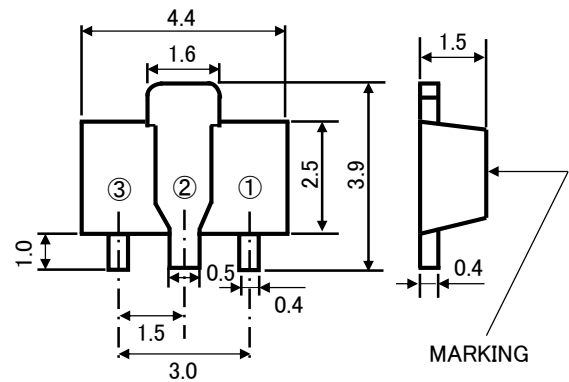
- High h_{FE} $h_{FE}=150\sim 800$
- High collector current $I_C=2A$
- Small collector to emitter saturation voltage
 $V_{CE(sat)}=0.17V$ type (@ $I_C=1A/I_B=50mA$)
- High collector dissipation $P_C=500mW$
- Small package for easy mounting

APPLICATION

Small type motor drive for VTR, deck, player, power supply

OUTLINE DRAWING

UNIT:mm



TERMINAL CONNECTOR

①: BASE

JEITA: SC-62

②: COLLECTOR

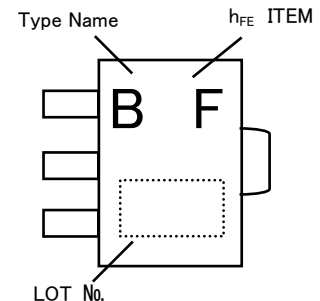
JEDEC: SOT-89

③: EMITTER

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

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	20	V
V_{EBO}	Emitter to Base voltage	6	V
V_{CEO}	Collector to Emitter voltage	16	V
I_C	Collector current	2	A
I_{CM}	Peak collector current	3	A
P_C	Collector dissipation($T_a=25^{\circ}C$)	500	mW
T_j	Junction temperature	+150	$^{\circ}C$
T_{stg}	Storage temperature	-55~+150	$^{\circ}C$

MARKING



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

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C=10\mu A, I_E=0mA$	20	-	-	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E=10\mu A, I_C=0mA$	6	-	-	V
$V_{(BR)CEO}$	C to E breakdown voltage	$I_C=2mA, R_{BE}=\infty$	16	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=16V, I_E=0mA$	-	-	0.2	μA
I_{EBO}	Emitter cut off current	$V_{EB}=4V, I_C=0mA$	-	-	0.2	μA
$h_{FE} \times$	DC forward current gain	$V_{CE}=4V, I_C=100mA$	150	-	800	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C=1A, I_B=50mA$	-	0.17	0.3	V
fT	Gain bandwidth product	$V_{CE}=2V, I_E=-10mA$	-	80	-	MHz
Cob	Collector output capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	-	28	-	pF

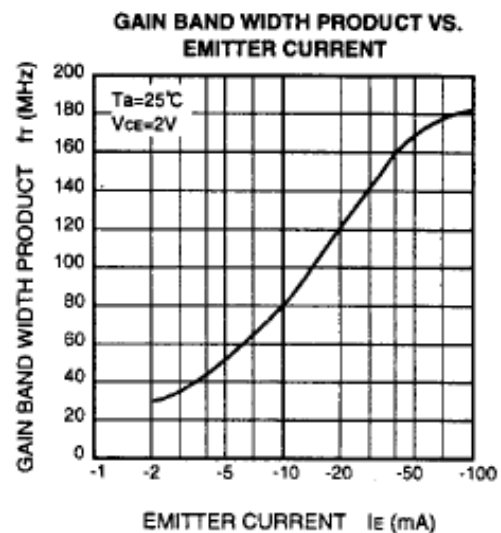
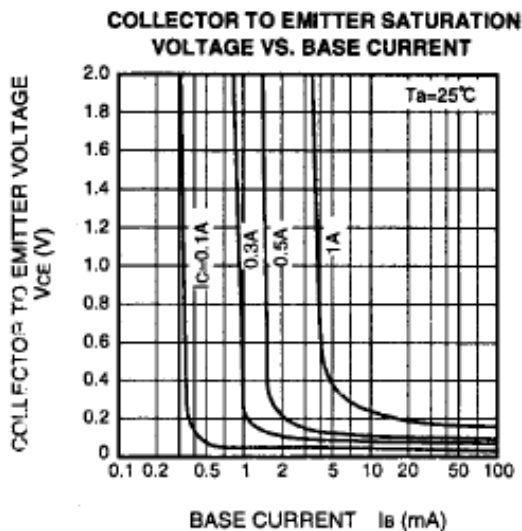
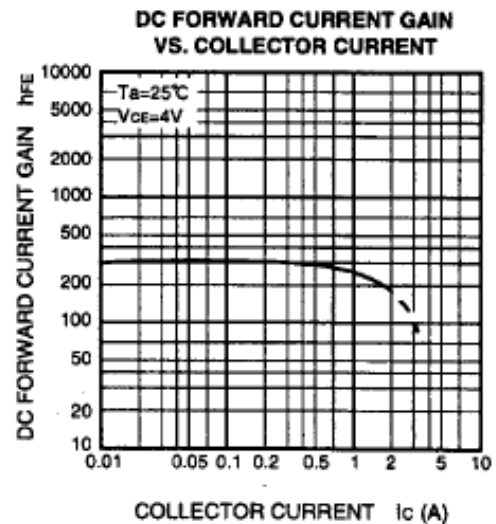
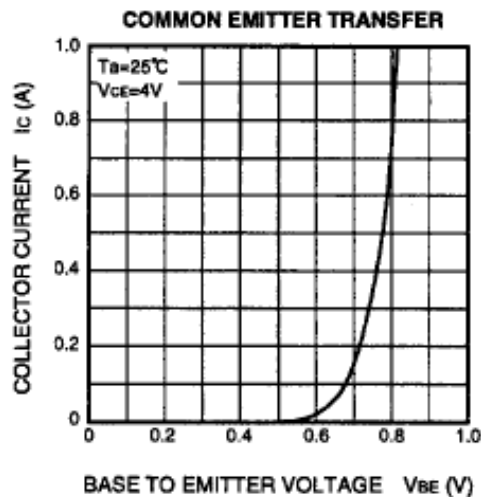
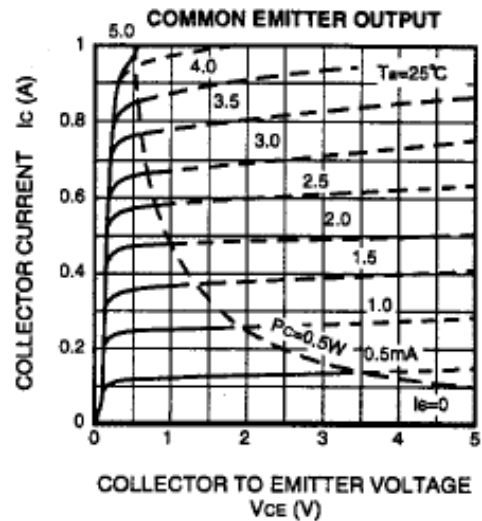
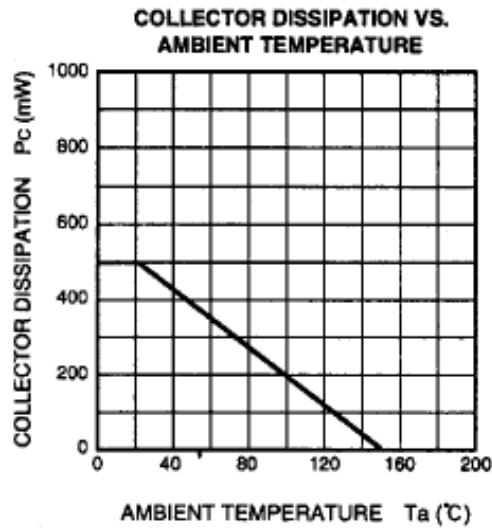
※) It shows h_{FE} classification at right table.

Item	E	F	G
h_{FE}	150~300	250~500	400~800

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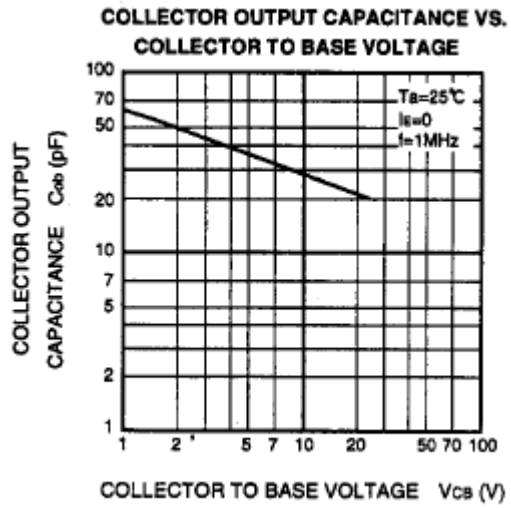
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TYPICAL CHARACTERISTICS



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