

DESCRIPTION

Mitsubishi 2SA1363 is a silicon PNP epitaxial type transistor designed with high collector current and high collector dissipation.

Complementary with 2SC3443.

FEATURE

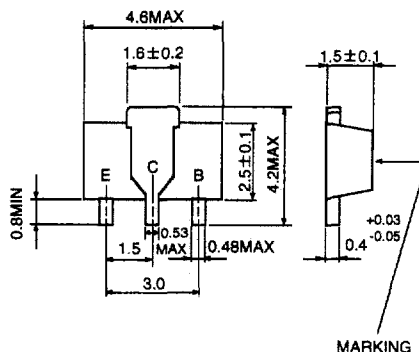
- High h_{FE} $h_{FE}=150$ to 800
- High collector current ($I_C=-2A$)
- Small collector to emitter saturation voltage
 $V_{CE(sat)}=-0.17V$ typ (@ $I_C=-1A$)
- High collector dissipation $P_C=500mW$
- Small package for mounting

APPLICATION

Small type motor drive for VCR, deck, player, power supply, etc.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR
B : BASE

EIAJ : SC-62
JEDEC : -

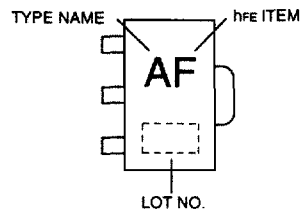
Note)

The dimension without tolerance represent central value.

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

Symbol	Parameter	Ratings	Unit
V_{CB0}	Collector to Base voltage	-20	V
V_{EB0}	Emitter to Base voltage	-6	V
V_{CEO}	Collector to Emitter voltage	-16	V
I_{CM}	Peak Collector current	-3	A
I_C	Collector current	-2	A
P_C	Collector dissipation($T_a=25^{\circ}C$)	500	mW
T_j	Junction temperature	+150	$^{\circ}C$
T_{slg}	Storage temperature	-55 to +150	$^{\circ}C$

MARKING



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

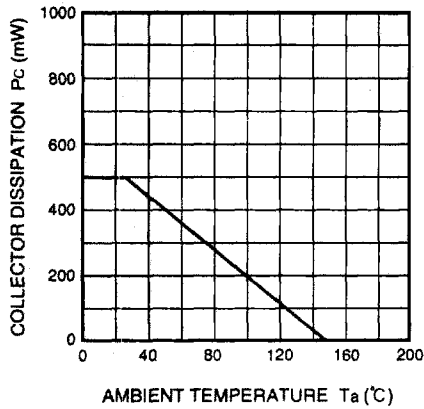
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=-10\mu A, I_E=0$	-20			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=-10\mu A, I_C=0$	-6			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=-2mA, R_{BE}=\infty$	-16			V
I_{CBO}	Collector cut off current	$V_{CB}=-16V, I_E=0$			-0.2	μA
I_{EBO}	Emitter cut off current	$V_{EB}=-4V, I_C=0$			-0.2	μA
$h_{FE} *$	DC forward current gain	$V_{CE}=-4V, I_C=100mA$	150		800	—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=-1A, I_B=-50mA$		-0.17	-0.3	V
f_T	Gain band width product	$V_{CE}=-2V, I_E=10mA$		80		MHz
C_{ob}	Collector output capacitance	$V_{CB}=-10V, I_E=0, f=1MHz$		42		pF

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

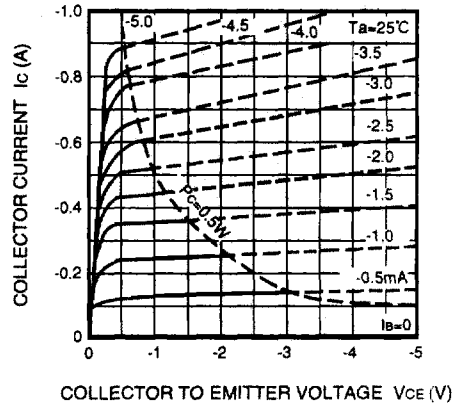
Marking	AE	AF	AG
h_{FE}	150 to 300	250 to 500	400 to 800

TYPICAL CHARACTERISTICS

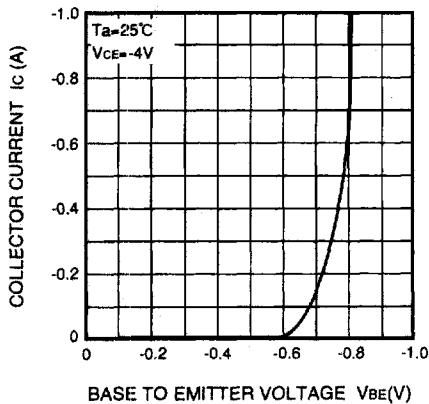
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



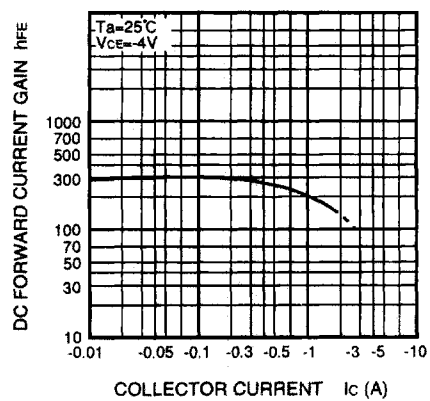
COMMON EMITTER OUTPUT



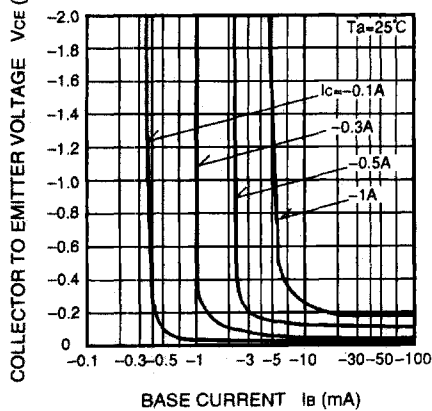
COMMON EMITTER TRANSFER



DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. BASE CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT

