

## PRELIMINARY

Notice: This is not a final specification  
Some parametric are subject to change.

# RT3A66M

Dual Transistor  
For Differential Amplify Application  
Silicon Pnp Epitaxial Type

## DESCRIPTION

RT3A66M is a silicon PNP epitaxial type dual transistor.  
It is designed for differential amplify application.

## FEATURE

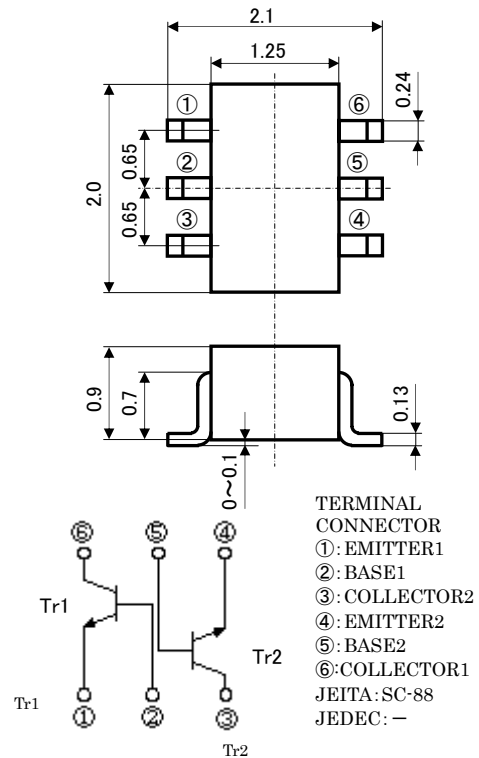
- High  $V_{ce0}$   $V_{ce0} = -150V$
- Good two elements characteristics  
 $h_{FE1}/h_{FE2} = 1.0$  typ  
 $|V_{BE1} - V_{BE2}| = 2mV$  typ

## APPLICATION

For differential amplify application.

## OUTLINE DRAWING

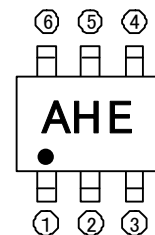
Unit: mm



## MAXIMUM RATING ( $T_a = 25^\circ C$ ) ( $Tr_1$ , $Tr_2$ )

SYMBOL	PARAMETER	RATING	UNIT
$V_{CBO}$	Collector to Base voltage	-160	V
$V_{EBO}$	Emitter to Base voltage	-5	V
$V_{CEO}$	Collector to Emitter voltage	-150	V
$I_{CM}$	Peak collector current	-200	mA
$I_C$	Collector current	-100	mA
$P_T$	Total allowance dissipation( $T_a = 25^\circ C$ )	200	mW
$T_j$	Junction temperature	+150	$^\circ C$
$T_{stg}$	Storage temperature	-55 ~ +150	$^\circ C$

## MARKING



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**ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1, Tr2.)**

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -100\mu A, I_E = 0mA$	-160	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10\mu A, I_C = 0mA$	-5	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-150	-	-	V
$I_{CBO}$	Collector cut off current	$V_{CB} = -120V, I_E = 0mA$	-	-	-100	nA
$I_{EBO}$	Emitter cut off current	$V_{EB} = -3V, I_C = 0mA$	-	-	-100	nA
hFE1	DC forward current gain1	$V_{CE} = -5V, I_C = -1mA$	45	-	-	-
hFE2	DC forward current gain2	$V_{CE} = -5V, I_C = -10mA$	90	-	270	-
hFE3	DC forward current gain3	$V_{CE} = -5V, I_C = -50mA$	45	-	-	-
VCE(sat)1	C to E saturation voltage1	$I_C = -10mA, I_B = -1mA$	-	-	-0.2	V
VCE(sat)2	C to E saturation voltage2	$I_C = -50mA, I_B = -5mA$	-	-	-0.5	V
VBE(sat)1	B to E saturation voltage1	$I_C = -10mA, I_B = -1mA$	-	-	-1.0	V
VBE(sat)2	B to E saturation voltage2	$I_C = -50mA, I_B = -5mA$	-	-	-1.0	V
$ V_{BE1} - V_{BE2} $ (※VBE1:Tr1,VBE2:Tr2)	B-E voltage differential	$V_{CE} = -5V, I_C = -1mA$	-	2	10	mV
hFE1/hFE2 (※hFE1:Tr1,hFE2:Tr2)	DC forward current gain ratio	$V_{CE} = -5V, I_C = -1mA$	0.9	1.0	1.1	-
VBE(on)	B to E on voltage	$V_{CE} = -5V, I_C = -10mA$	-	-	-0.77	V
fT	Gain bandwidth product	$V_{CE} = -10V, I_E = 10mA$	100	-	300	MHz
Cob	Collector output capacitance	$V_{CB} = -10V, I_E = 0mA, f = 1MHz$	-	2.8	6	pF

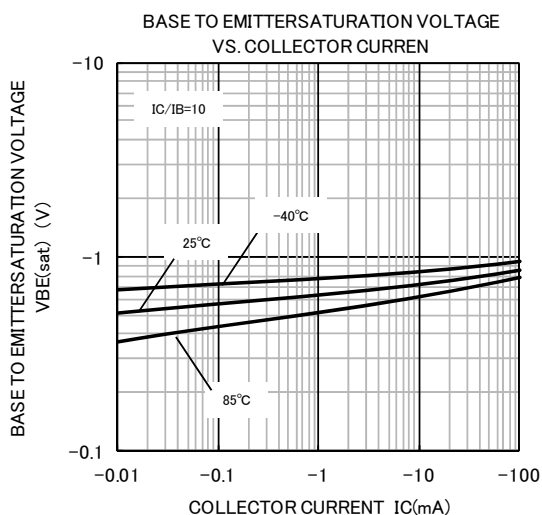
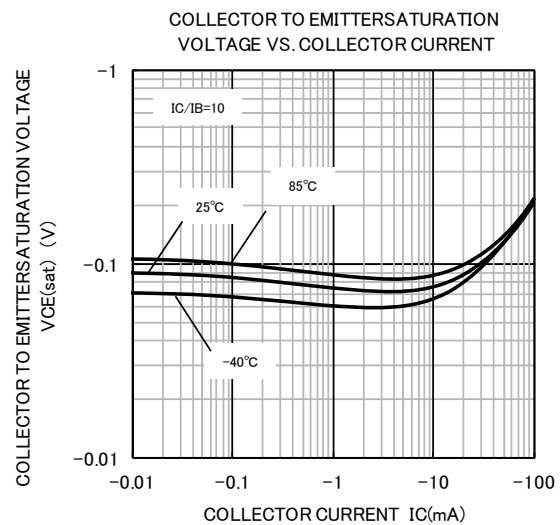
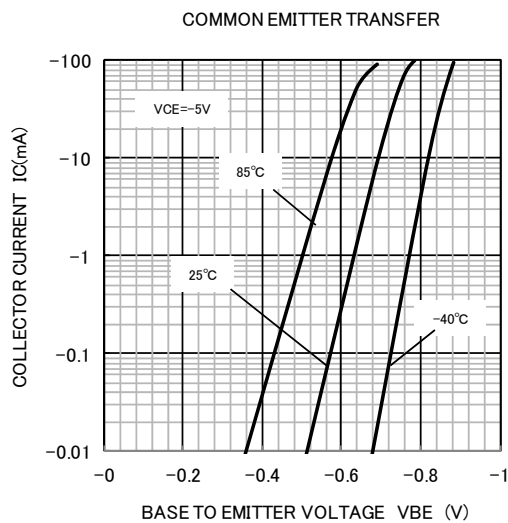
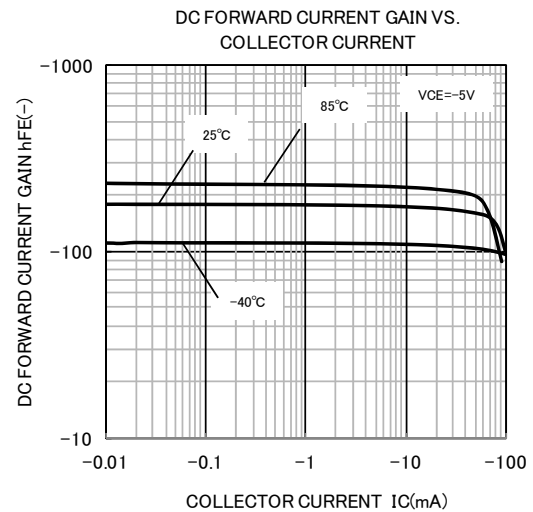
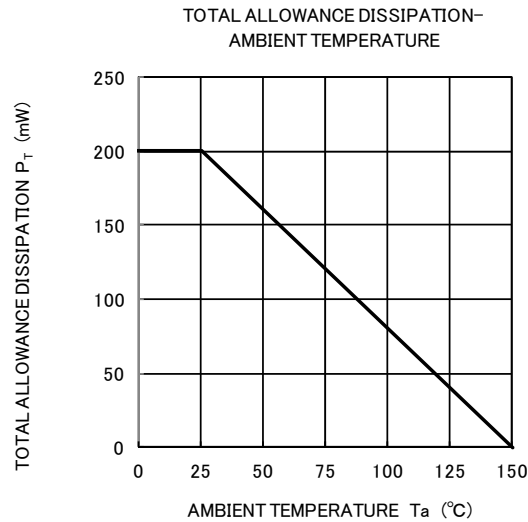
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## TYPICAL CHARACTERISTICS (Tr1,Tr2.)

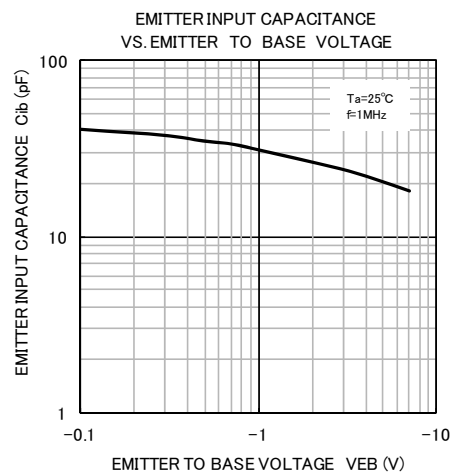
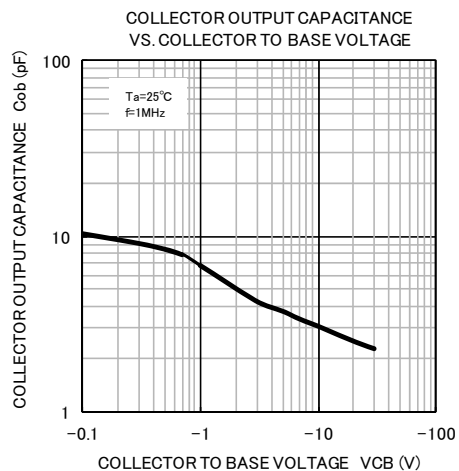
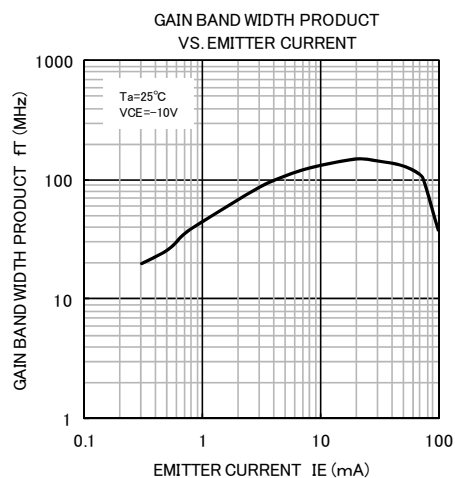


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