



2SA1837

APPLICATIONS

Power Amplifier Applications

FEATURES


High collector voltage $V_{CEO}=-230V$ (min)

Complementary to 2SC4793

High transition frequency : $f_T=70MHz$ (Typ.)

RoHS product

$V_{CEO}=-230V$ (min)
2SC4793
 $f_T=70MHz$ (Typ.)
RoHS

Package		 <p>TO-220MF</p>
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ORDER MESSAGE				
Order codes	Marking	Halogen Free	Package	Packaging
2SA1837-O-MF-N-B	2SA1837	NO	TO-220MF	Tube

ABSOLUTE RATINGS ($T_c=25^{\circ}C$ unless otherwise noted)

	Parameter	Symbol	Value	Unit
—	Collector- Emitter Voltage	V_{CBO}	-230	V
—	Collector- Emitter Voltage $I_B=0$	V_{CEO}	-230	V
—	Emitter-Base Voltage	V_{EBO}	-5	V
	Collector Current DC	I_C	-1	A
	Base Current	I_B	-0.1	A
	Collector Dissipation($T_a=25^{\circ}C$)	P_C	2.0	W
	Collector Dissipation($T_c=25^{\circ}C$)		20	W
	Junction Temperature	T_j	150	
	Storage Temperature	T_{stg}	-55~+150	

THERMAL CHARACTERISTIC

Parameter	Symbo	min	max	Unit
Thermal Resistance Junction Ambient TO-220MF	$R_{th(j-a)}$	-	62.5	/W
Thermal Resistance Junction Case TO-220MF	$R_{th(j-c)}$	-	6.25	/W

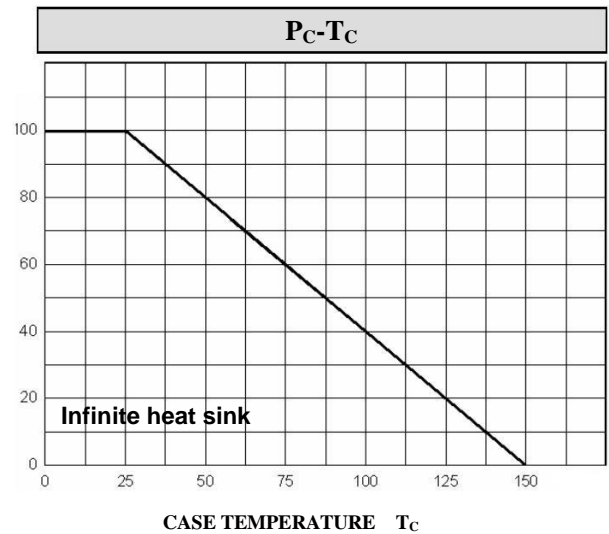
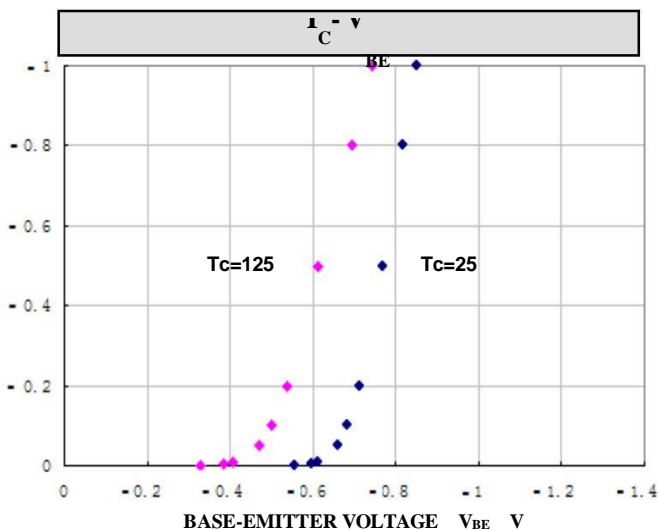
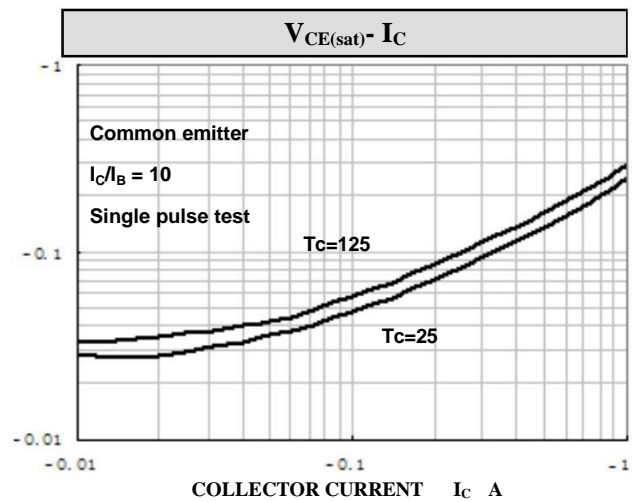
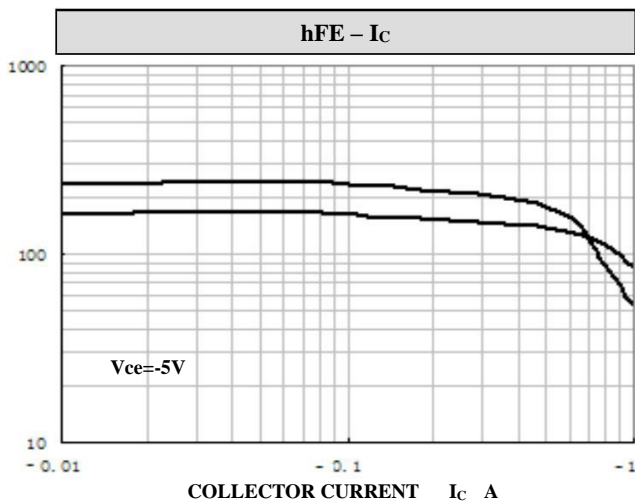




ELECTRICAL CHARACTERISTIC

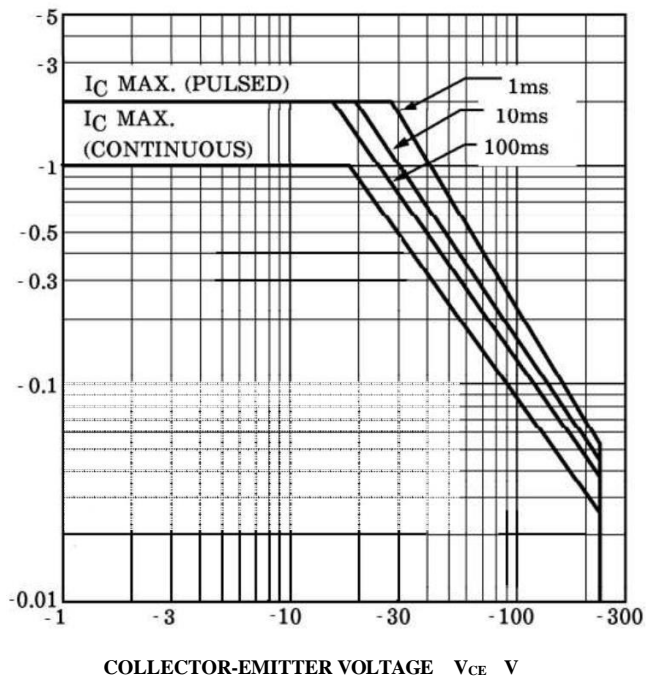
Parameter	Tests conditions	Value(min)	Value(typ)	Value(max)	Unit
I_{CBO}	$V_{CE}=-230V, I_E=0$	-	-	-1.0	μA
I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-1.0	μA
$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-230	-	-	V
hFE	$V_{CE}=-5V, I_C=0.1A$	100	160	270	-
$V_{CE(sat)}$	$I_C=-0.5A, I_B=-0.05A$	-	-	-1.5	V
$V_{BE ON}$	$V_{CE}=-5V, I_C=-0.5A$	-	-	-1.0	V
f_T	$V_{CE}=-10V, I_C=-0.1A,$	-	70	-	MHz
C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	-	30	-	pF

ELECTRICAL CHARACTERISTICS (curves)





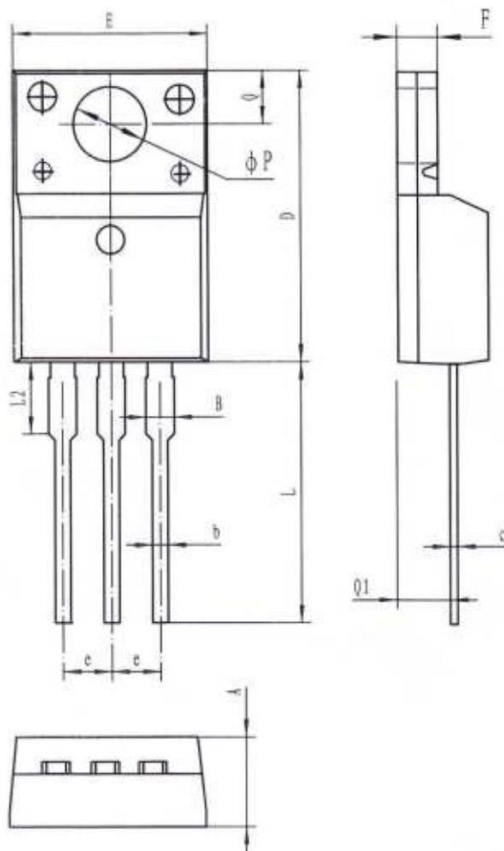
SAFE OPERATION AREA



PACKAGE MECHANICAL DATA

TO-220MF

Unit mm



	mm
A	4.50-4.90
B	<1.47
b	0.70-0.90
c	0.45-0.60
D	15.67-16.07
E	9.96-10.36
e	2.54TYPE
F	2.34-2.74
L	12.58-13.38
L2	3.13-3.33
P	3.08-3.28
Q	3.2-3.4
Q1	2.56-2.96





<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>	<p>NOTE</p> <p>1. Jilin Sino-microelectronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.</p> <p>2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.</p> <p>3. Please do not exceed the absolute maximum ratings of the device when circuit designing.</p> <p>4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.</p>
<p style="text-align: right;">99</p> <p>132013 86-432-64678411 86-432-64665812 www.hwdz.com.cn</p> <p style="text-align: right;">99</p> <p>132013 86-432-64675588 64675688 64678411 : 86-432-4671533</p>	<p>CONTACT JILIN SINO-MICROELECTRONICS CO., LTD.</p> <p>ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China. Post Code: 132013 Tel 86-432-64678411 Fax 86-432-64665812 Web Site www.hwdz.com.cn</p> <p>MARKET DEPARTMENT ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China. Post Code: 132013 Tel: 86-432-64675588 64675688 64678411 Fax: 86-432-64671533</p>

Appendix**Revision History**

Date	Last Rev.	New Rev.	Description of Changes
2013-12-30	201311A	201312B	

