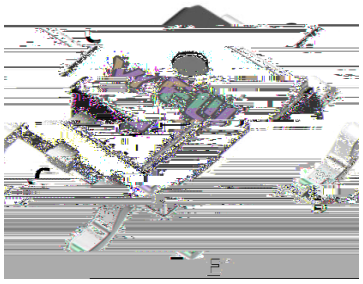
lastic-Encapsulate Transistors



DESCRI TIO

!"#$$!<# %& ' ( )%*(+,- ./,- 0,/1'2 1.'3&%&1,.4) &%23)5,.'*)%, +,- .'(+/%5% .4 #67#6 8,30 .1 .'3) 0,/1'2 . 2*/'1,.9

FEATURES

➢ :%2 8*.. 31 ,*1+*1 *+ 1, ;<

➢ 6,(+/ (311, !"=>>!<#

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	40	V
Collector-Emitter Voltage	BV_{CEO}	30	V
Emitter-Base Voltage	BV_{EBO}	6	V
Collector Current	I_C	3	A
Collector Power Dissipation	P_C	1.25	W
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55～150	℃

Electrical Characteristics (Ta=25℃)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	I_C = 100μA，I_E = 0	40			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C = 1mA，I_B = 0	30			V
Emitter-base breakdown voltage	BV_{EBO}	I_E = 100μA，I_C = 0	6			V
Collector -base cut-off current	I_{CBO}	V_{CB} = 40V，I_E = 0	-		1	μA
Collector- emitter cut-off current	I_{CEO}	V_{CE} = 30V，I_E = 0			10	μA
Emitter- base cut-off current	I_{EBO}	V_{EB} = 3V，I_C = 0			1	μA
DC current gain*	h_{FE}	V_{CE}= 2V，I_C= 20mA V_{CE}= 2V，I_C=1.0A	30 60		 400	
Collector-emitter saturation voltage*	$V_{CE(sat)}$	I_C = 2.0A, I_B = 0.2A			0.5	V
Base -emitter saturation voltage*	$V_{BE(sat)}$	I_C = 2.0A, I_B = 0.2A			1.5	V
Transition frequency	f_T	V_{CE} = 5V，I_B = 0.1A	50			MHz

hFE Classification

Classification	2SD882AD-R	2SD882AD-Q	2SD882AD-P	2SD882AD-E
h_{FE}	60-120	100-200	160-320	200-400

Typical Characteristic

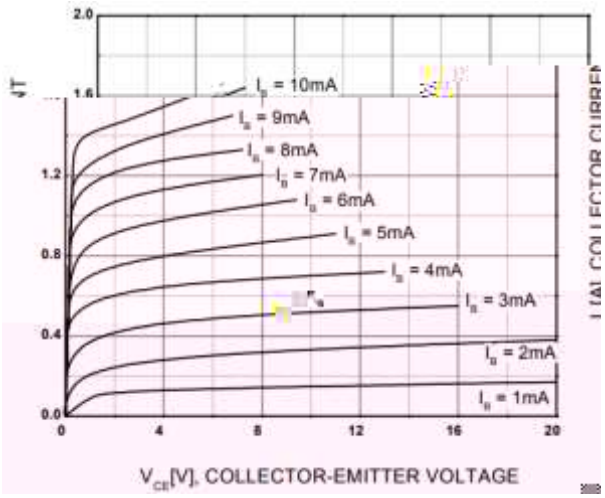


Figure 1. Static Characteristic

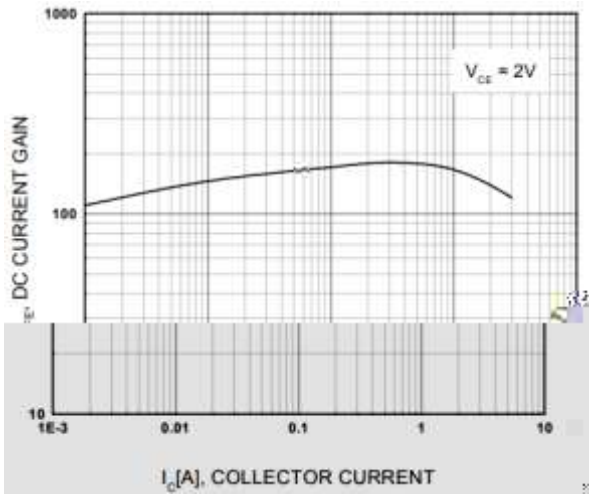


Figure 2. DC current Gain

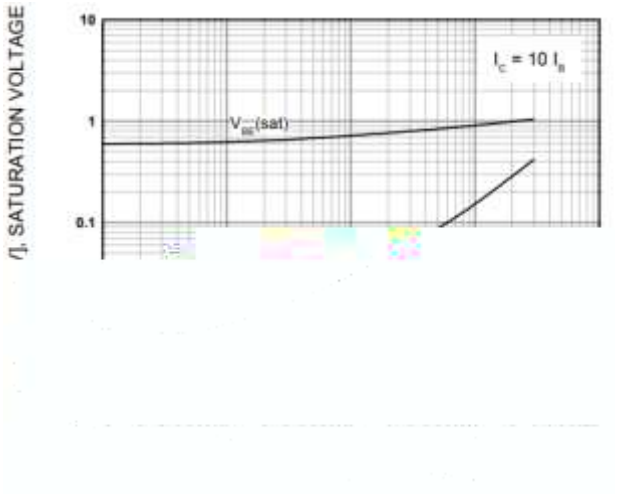


Figure 3. Base-Emitter On Voltage

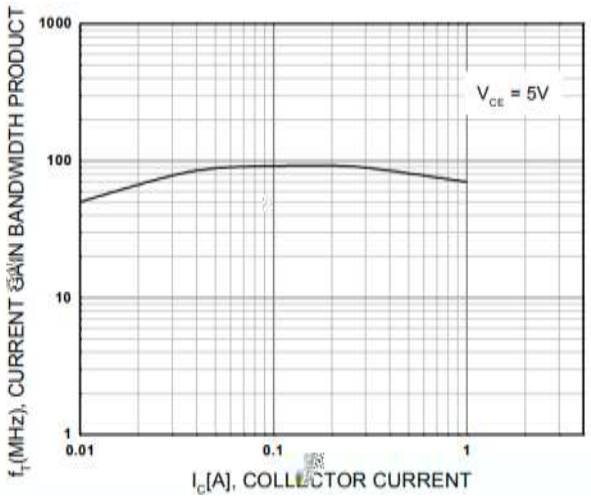


Figure 4. Current Gain Bandwidth Product

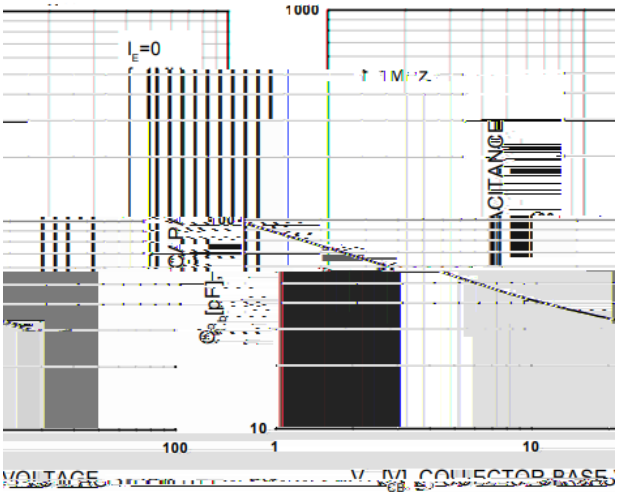
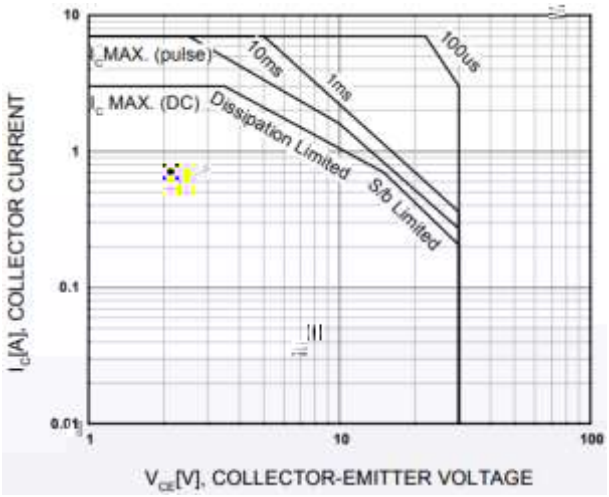
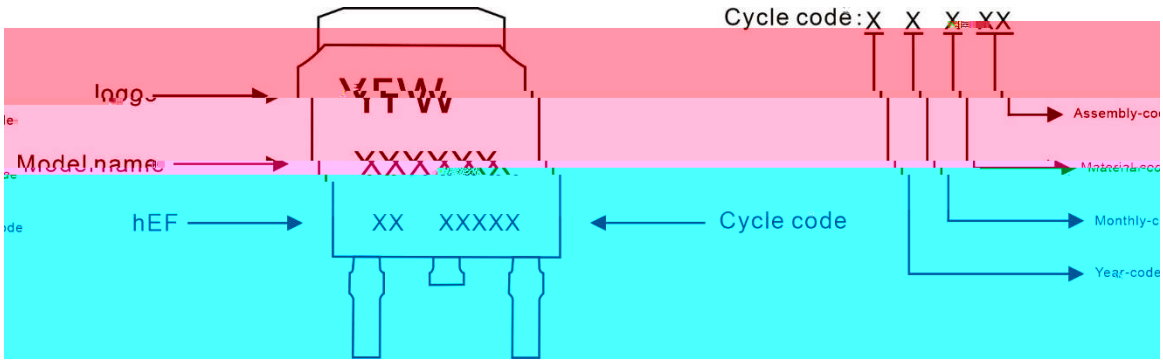


Figure 5. Collector Output Capacitance



Marking Diagram

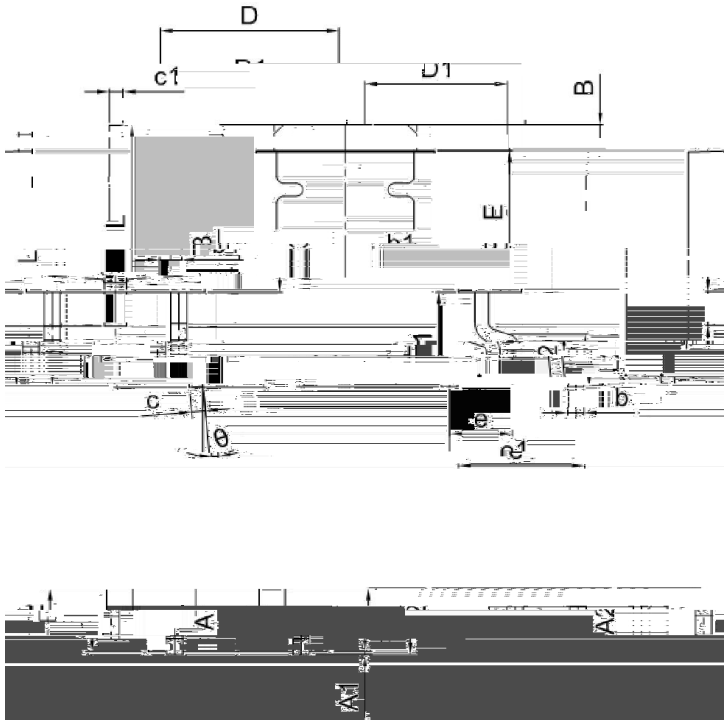


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
2SD882AD	TO-252	0.011oz(0.32g)	2500pcs/reel	5000pcs/box 25000pcs/Carton

Package Dimensions

TO-252



Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.20	2.50	0.087	0.098
A1	0.00	0.12	0.000	0.005
A2	2.20	2.40	0.087	0.094
B	1.20	1.60	0.047	0.063
b	0.50	0.70	0.020	0.028
b1	0.70	0.90	0.028	0.035
c	0.40	0.60	0.016	0.024
c1	0.40	0.60	0.016	0.024
D	6.35	6.65	0.250	0.262
D1	5.20	5.40	0.205	0.213
E	5.40	5.70	0.213	0.224
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	10.00	11.00	0.393	0.433
L1	2.70	3.10	0.106	0.122
L2	1.40	1.80	0.055	0.071
L3	0.90	1.50	0.035	0.059

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website https://www.yfwdiode.com, or consult YFW sales office for further assistance.