

### **FEATURES**

Collector Current: I<sub>C</sub>=3A

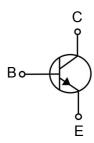
• Power Dissipation of 500mw



SOT89-3L

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
D882	SOT89-3L	D882	1000



# MAXIMUM RATINGS (Ta=25 unless otherwise noted)

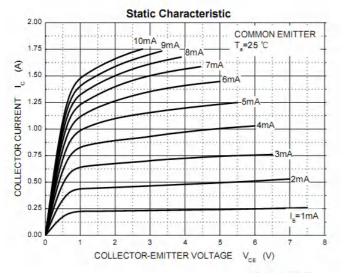
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V <sub>CBO</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>c</sub>	3	А
Collector Power Dissipation	P <sub>c</sub>	500	mW
Thermal Resistance From Junction To Ambient	R <sub>OJA</sub>	250	°CW
Junction Temperature	T <sub>j</sub>	150	℃
Storage Temperature	T <sub>stg</sub>	-55∼+150	℃

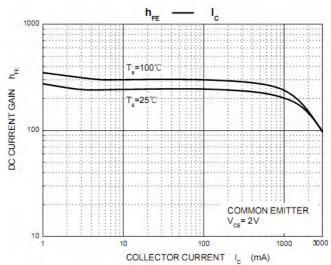


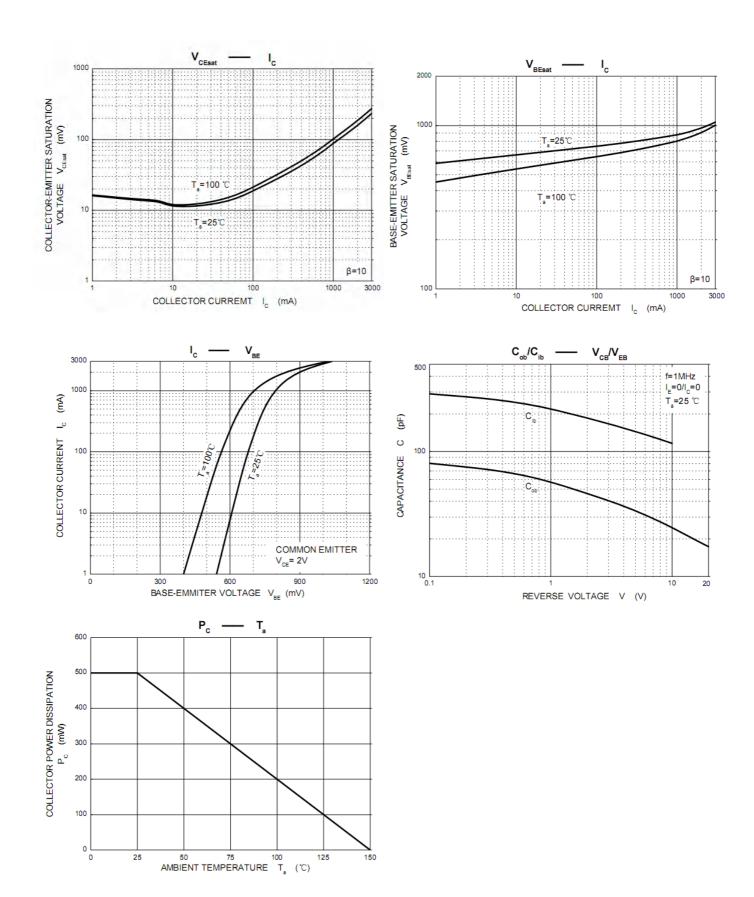
#### ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> =0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_{\rm C}$ = 10mA, $I_{\rm B}$ =0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I <sub>E</sub> = 100μA, I <sub>C</sub> =0	6			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 40V, I <sub>E</sub> =0			1	μΑ
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = 30V, I <sub>B</sub> =0			10	μΑ
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 6V, I <sub>C</sub> =0			1	μΑ
DC comment main	h <sub>FE(1)</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> = 1A	160		320	
DC current gain	h <sub>FE(2)</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> = 100mA	32			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 2A, I <sub>B</sub> = 0.2 A			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I <sub>C</sub> = 2A, I <sub>B</sub> = 0.2 A			1.5	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 5V , Ic=0.1A f =10MHz	50			MHz

### **Typical Characteristics**

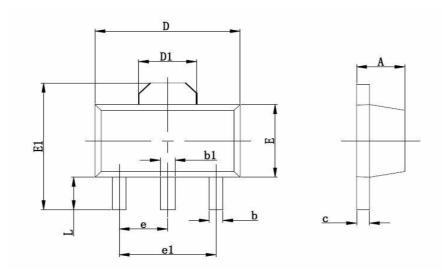








# **SOT89-3L Package Outline Dimensions**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
Α	1.400	1.600	0.055	0.063
b	0.350	0.520	0.013	0.197
b1	0.400	0.580	0.016	0.023
С	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF		0.061 REF	
E	2.350	2.550	0.091	0.102
E1	3.940	4.250	0.155	0.167
е	1.500 TYP		0.060TYP	
e1	3.000 TYP		0.118TYP	
L	0.900	1.100	0.035	0.047

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