

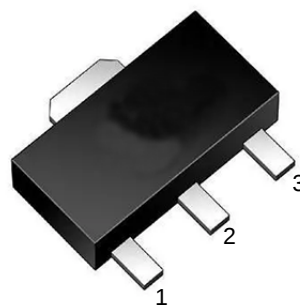
SOT-89-3L Plastic-Encapsulate Transistors

D882

TRANSISTOR (NPN)

• Features

- Complimentary to B772



1. BASE
2. COLLECTOR
3. EMITTER

SOT-89-3L

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Collector Power Dissipation	P_C	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	°C

• ELECTRICAL CHARACTERISTICS (T_a=25°C)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 30V, I_B = 0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6V, I_C = 0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 2V, I_C = 1A$	60		400	
	$h_{FE(2)}$	$V_{CE} = 2V, I_C = 100mA$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.2A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 0.2A$			1.5	V
Transition frequency	f_T	$V_{CE} = 5V, I_C = 0.1A$ $f = 10MHz$	50			MHz

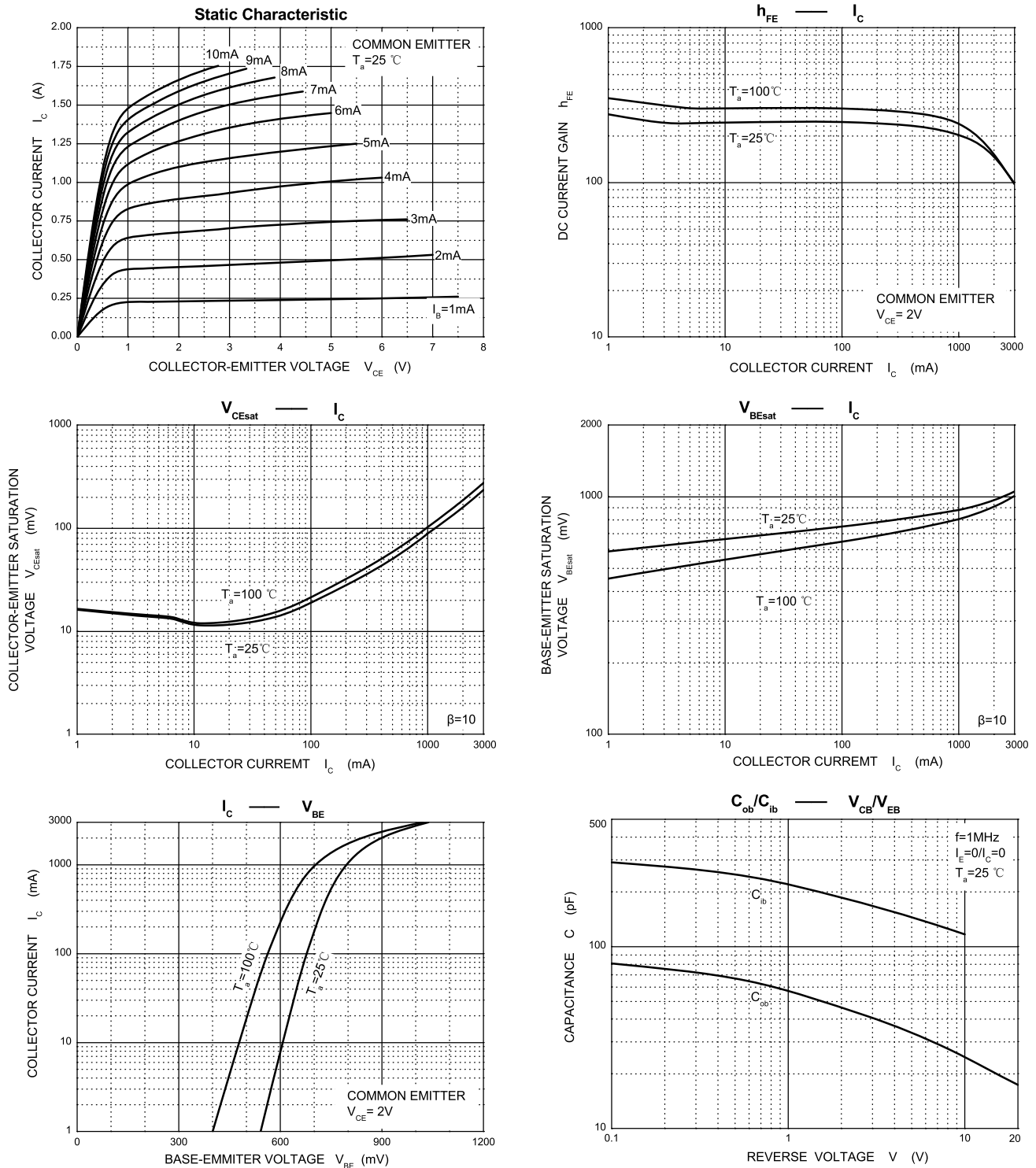
• CLASSIFICATION OF $h_{FE(1)}$

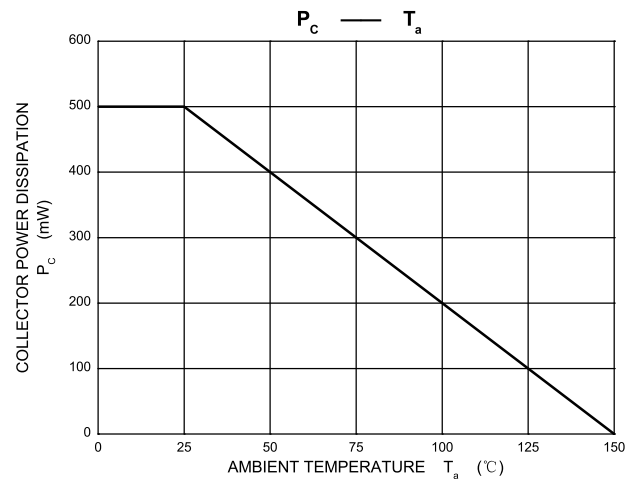
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

• Ordering Information:

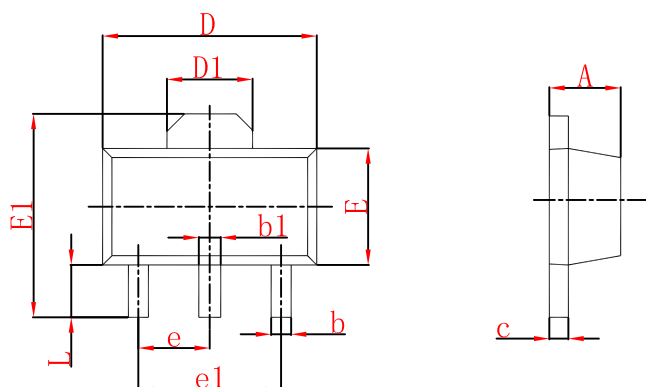
Part NO.	D882
Marking	D882
Packing Information	REEL TAPE
Basic ordering unit (pcs)	1000

• Typical Characteristics

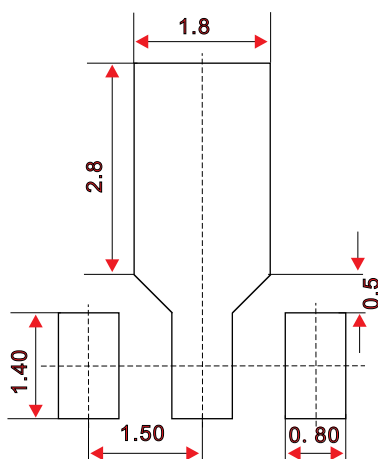




SOT-89-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	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	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.