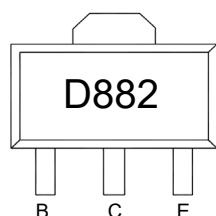
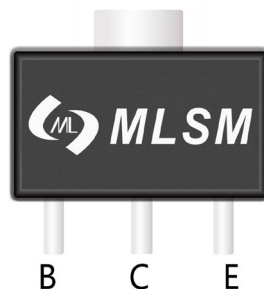


Features

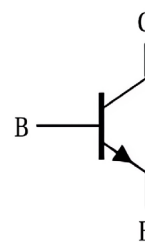
- Power dissipation



Marking and pin assignment



SOT-89-3L top view



Schematic diagram



Pb-Free



Halogen-Free

Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	3	A
P_C	Collector Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	250	°C/W
$R_{\theta JC}$	Thermal Resistance Junction to Case	4.17	°C/W
T_J, T_{STG}	Operating and Storage Temperature Range	-55~+150	°C

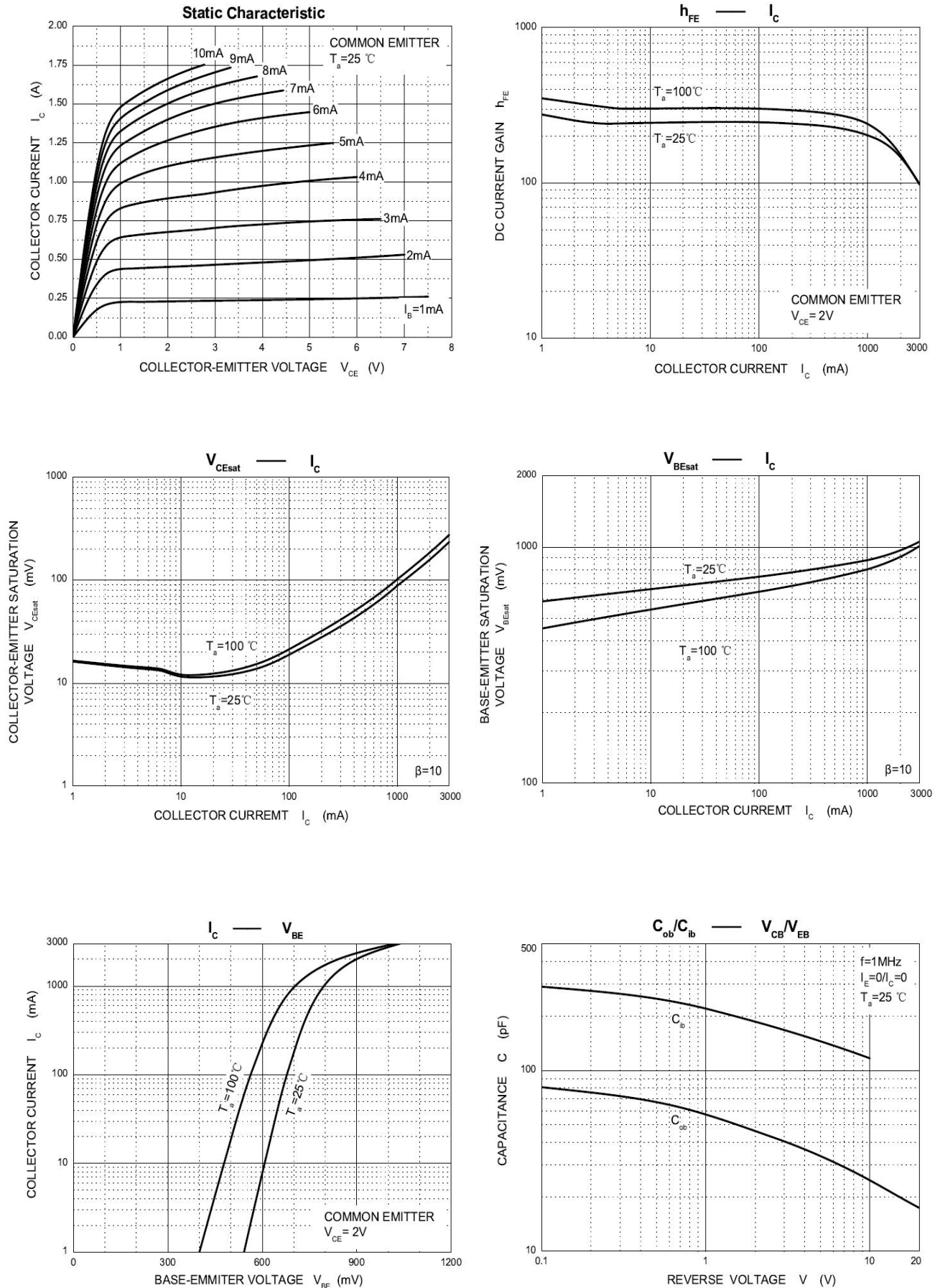
Electrical Characteristics (Ta=25°C unless otherwise specified)

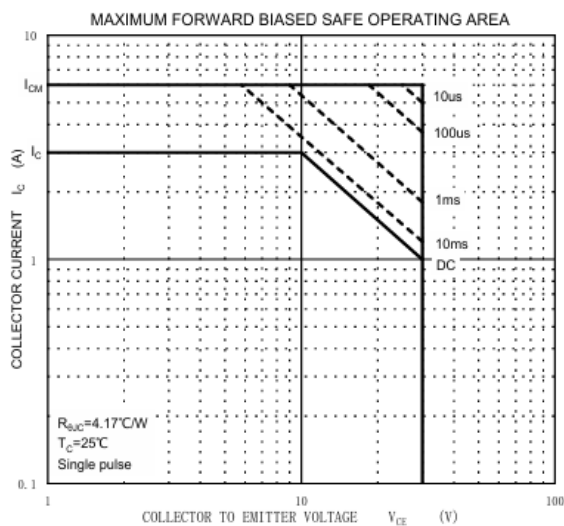
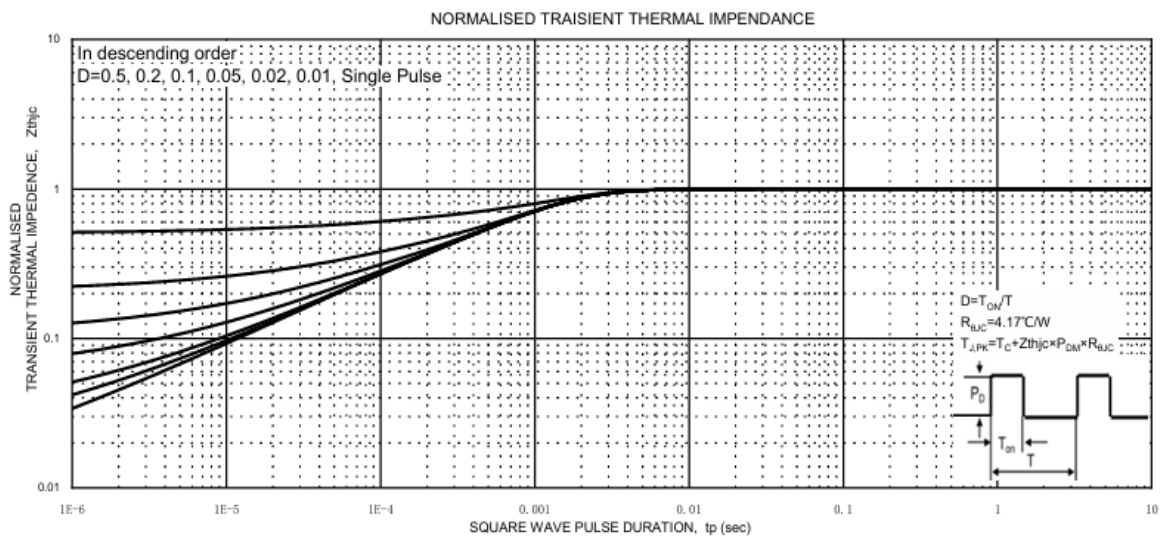
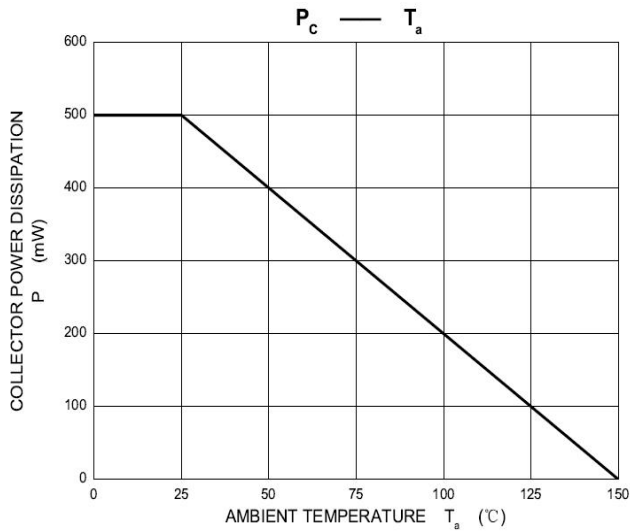
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	45	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10mA, I_B=0$	30	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu A, I_C=0$	6	--	--	V
I_{CBO}	Collector cut-off current	$V_{CB}=40V, I_E=0$	--	--	1	μA
I_{CEO}	Collector cut-off current	$V_{CE}=30V, I_B=0$	--	--	10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V, I_C=0$	--	--	1	μA
$h_{FE(1)}$	DC current gain	$V_{CE}=2V, I_C=1A$	60	--	400	
$h_{FE(2)}$		$V_{CE}=2V, I_C=100mA$	32	--	--	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=2A, I_B=0.2A$	--	--	0.5	V
$V_{BE(sat)}$	Base-emitter voltage	$I_C=2A, I_B=0.2A$	--	--	1.5	V
f_T	Transition frequency	$V_{CE}=5V, I_C=0.1A, f=10MHz$	50	--	--	MHz

Classification Of $h_{FE(1)}$

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

Typical Operating Characteristics

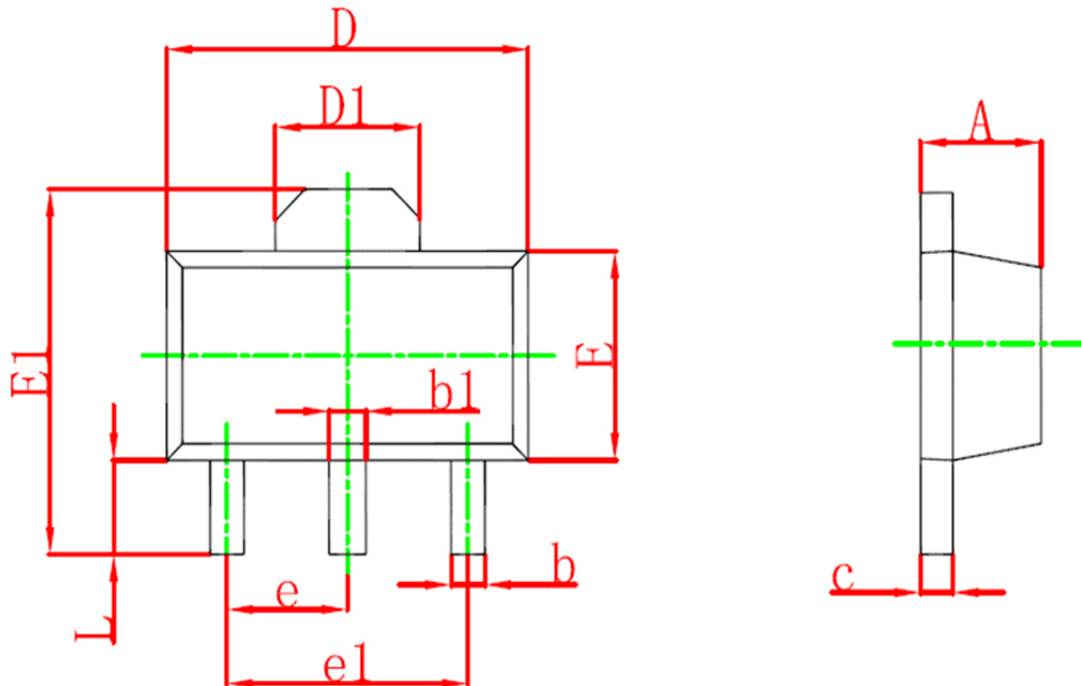




Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
D882	SOT-89-3L	D882	1,000	10,000	40,000	7"reel

SOT-89-3L Package information



Symbol	Dimensions in Millimeters(mm)		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