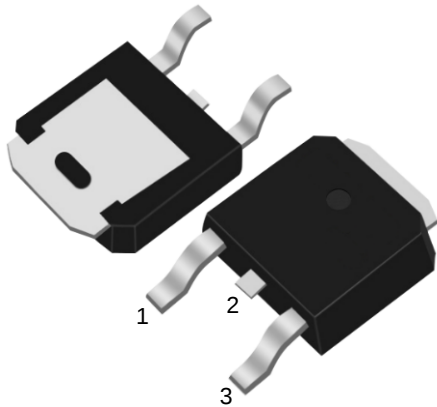


TO-252-2L Plastic-Encapsulate Transistors

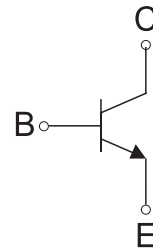
D882M TRANSISTOR (NPN)

• Features

- Complimentary to B772M



1. BASE
2. COLLECTOR
3. EMITTER



TO-252-2L

Equivalent Circuit

• Ordering Information:

Part NO.	D882M
Marking	D882M
Packing Information	REEL TAPE
Basic ordering unit (pcs)	2500

• 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	1.25	W
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

• ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

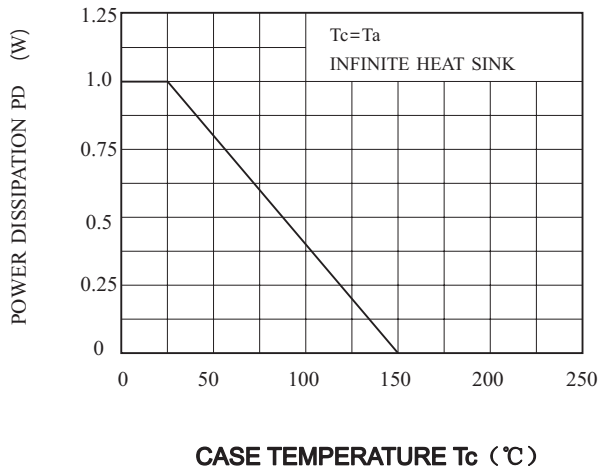
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(\text{BR})_{\text{CBO}}$	$I_C = 100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V(\text{BR})_{\text{CEO}}$	$I_C = 10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V(\text{BR})_{\text{EBO}}$	$I_E = 100\mu\text{A}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}} = 40\text{V}, I_E=0$			1	μA
Collector cut-off current	I_{CEO}	$V_{\text{CE}} = 30\text{V}, I_B=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}} = 6\text{V}, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{\text{CE}} = 2\text{V}, I_C = 1\text{A}$	60		400	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_C = 2\text{A}, I_B = 0.2\text{A}$			0.5	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_C = 2\text{A}, I_B = 0.2\text{A}$			1.5	V
Transition frequency	f_T	$V_{\text{CE}} = 5\text{V}, I_C=0.1\text{A}$ $f = 10\text{MHz}$		90		MHz

• CLASSIFICATION OF $h_{\text{FE}(1)}$

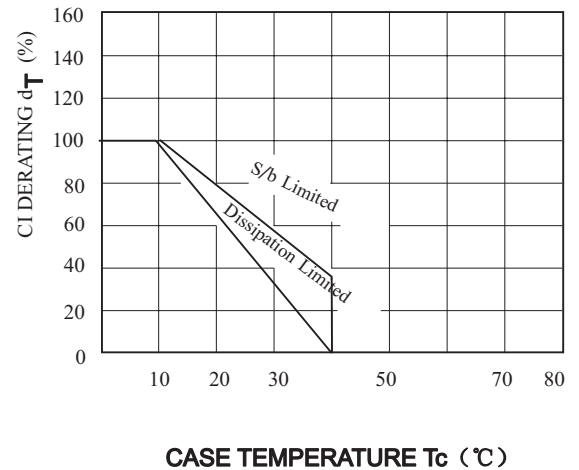
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

• Typical Characteristics

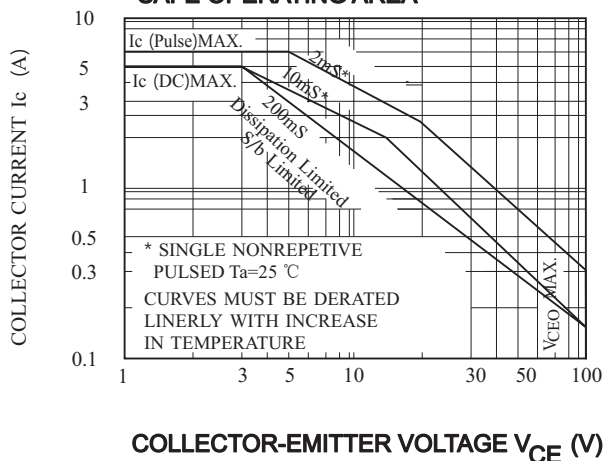
Power Dissipation vs. Case Temperature



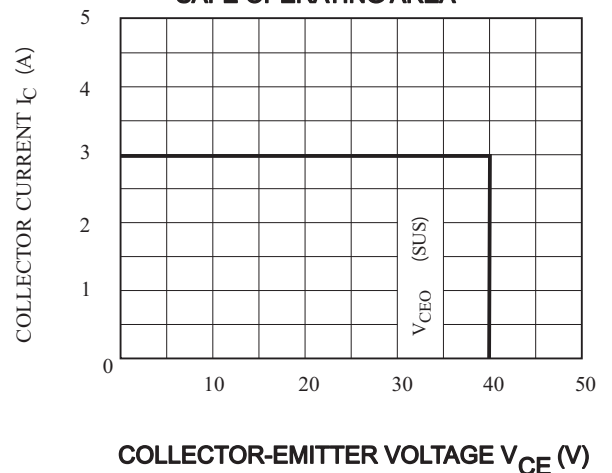
$D_T - T_c$



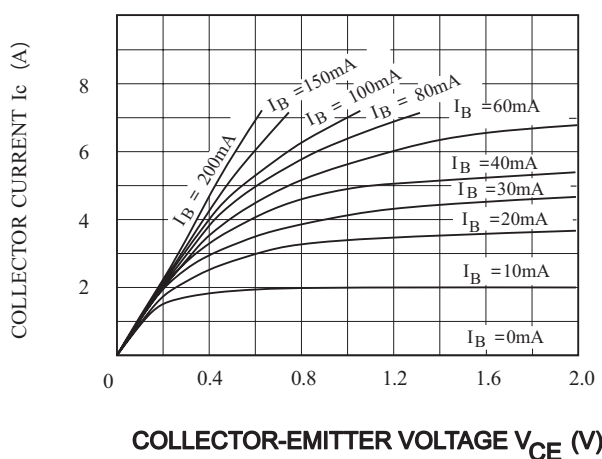
SAFE OPERATING AREA



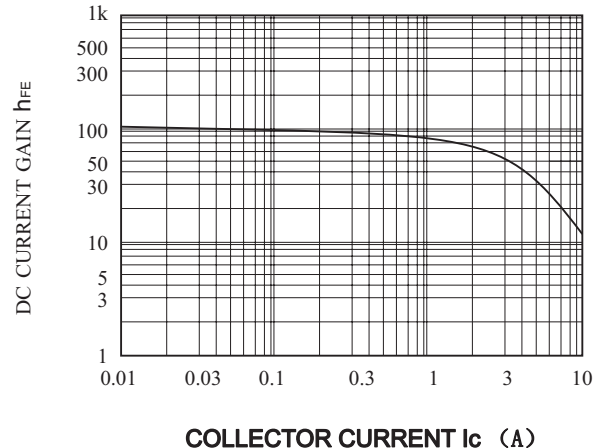
**REVERSE BIAS
SAFE OPERING AREA**



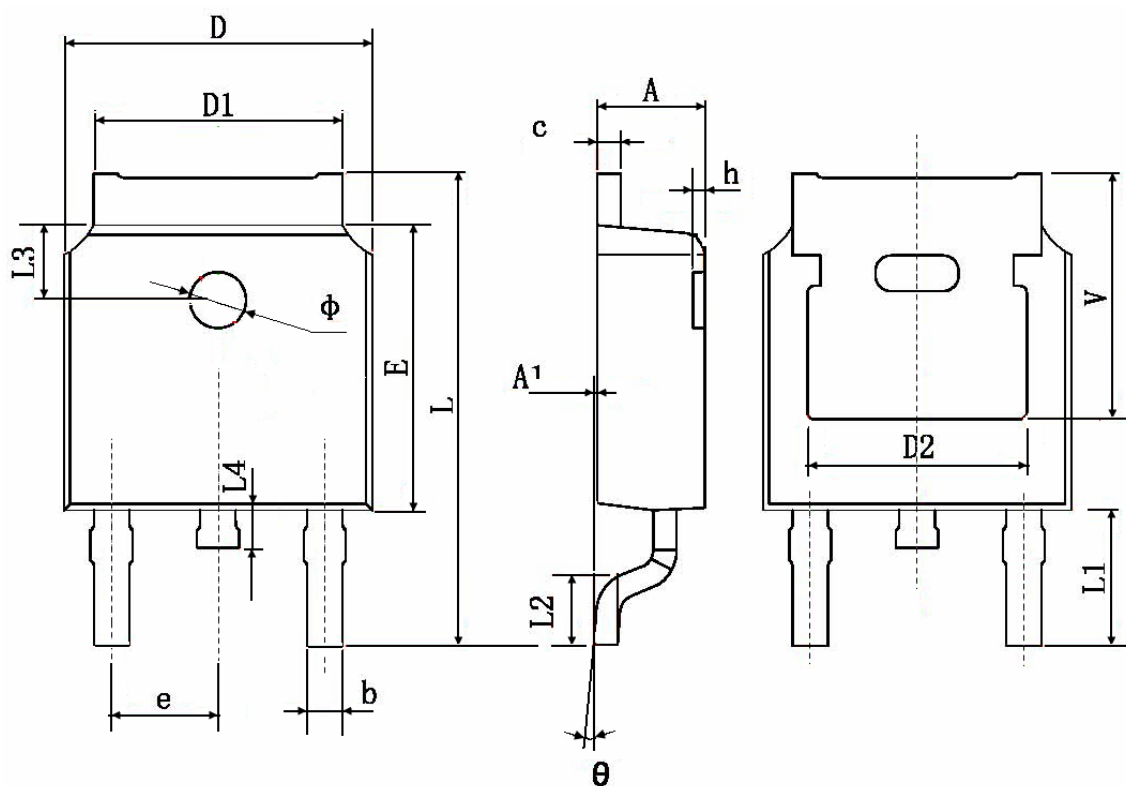
$I_c - V_{CE}$



$H_{FE} - I_c$



TO-252 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.660	0.860	0.026	0.034
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.83 TYP.		0.190 TYP.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 TYP.		0.114 TYP.	
L2	1.400	1.700	0.055	0.067
L3	1.600 TYP.		0.063 TYP.	
L4	0.600	1.000	0.024	0.039
ϕ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 TYP.		0.211 TYP.	