

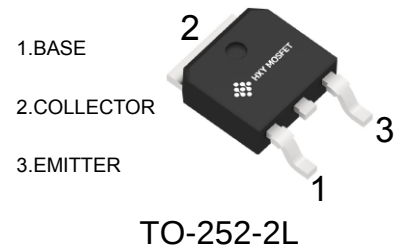


Features

- Power Switching Applications

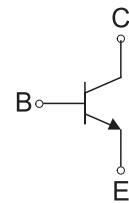
Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
3DD13003	TO-252-2L	Tape and Reel	2500



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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	700	V
V _{CEO}	Collector-Emitter Voltage	500	V
V _{EBO}	Emitter-Base Voltage	9	V
I _C	Collector Current -Continuous	1.5	A
P _C	Collector Dissipation	1.25	W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

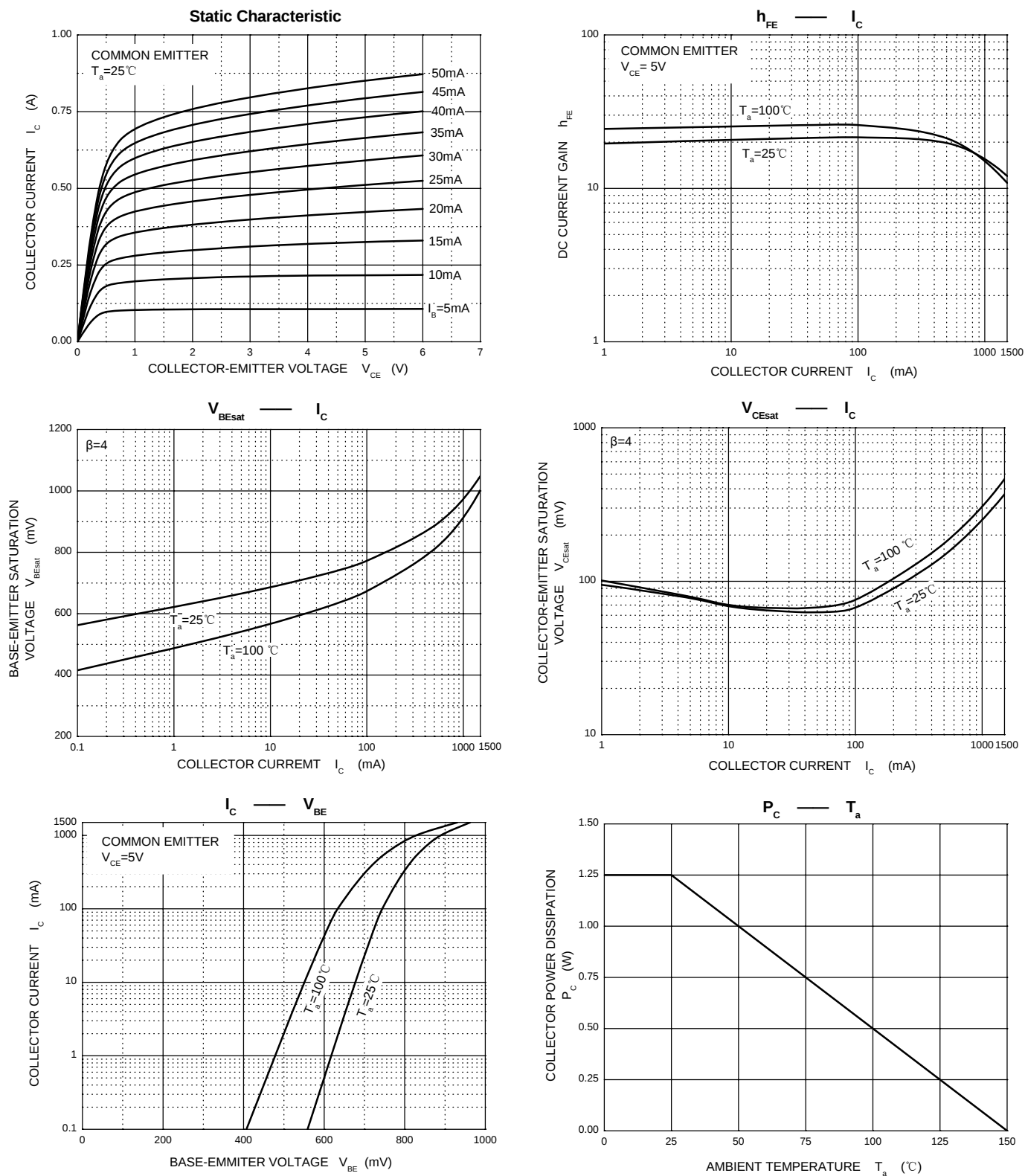


Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 1mA, I _E =0	700			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 10 mA, I _B =0	500			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 1mA, I _C =0	9			V
Collector cut-off current	I _{CBO}	V _{CB} = 700V, I _E =0			0.5	mA
Collector cut-off current	I _{CEO}	V _{CE} = 400V, I _B =0			0.5	mA
Emitter cut-off current	I _{EBO}	V _{EB} = 7 V, I _C = 0			0.5	mA
DC current gain	h _{FE} (1)	V _{CE} = 5 V, I _C = 0.5 A	20		30	
	h _{FE} (2)	V _{CE} = 5 V, I _C = 1.5A	5			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =0.5A, I _B = 200 mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =0.5A, I _B = 200mA			1.2	V
Base-emitter voltage	V _{BE}	I _E = 2A			3	V
Transition frequency	f _T	V _{CE} =10V, I _C =100mA f =1MHz	5			MHz
Fall time	t _f	I _C =1A, I _{B1} =-I _{B2} =0.2A V _{CC} =100V			0.5	μs
Storage time	t _s	I _C =250mA	1.5		3.5	μs

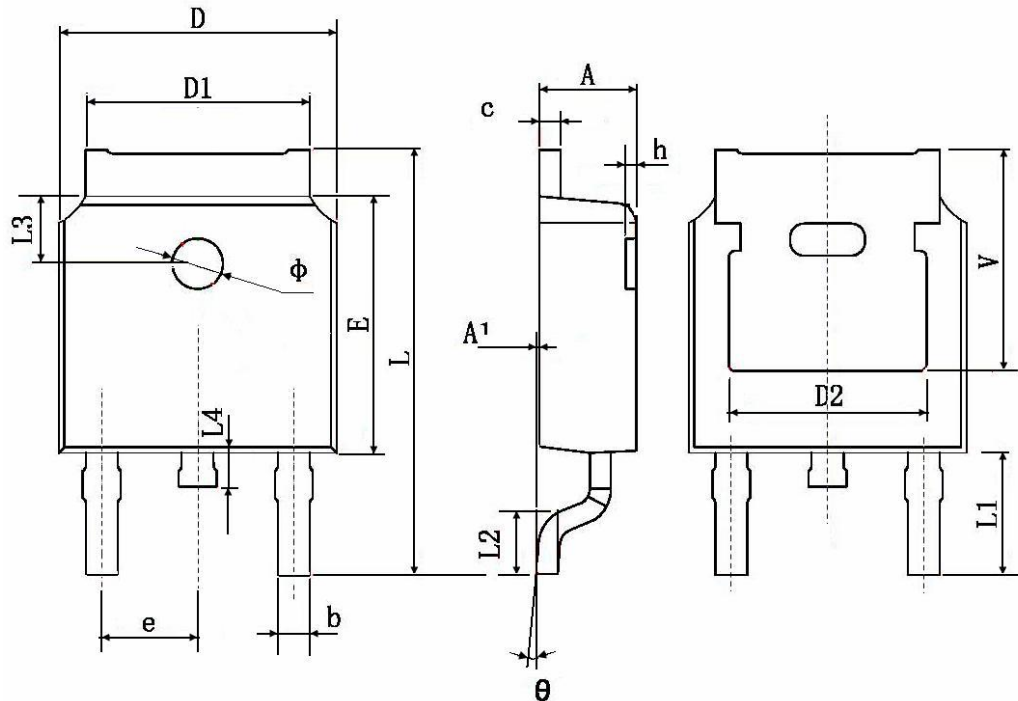


Typical Characteristics





TO-252-2L 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	0.483 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.	



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