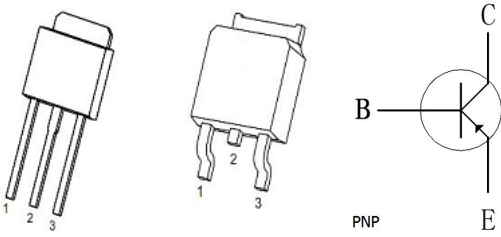


TRANSISTOR (NPN)	TO-252/TO-251 Plastic-Encapsulate Transistors																																										
<p><u>TO-252/TO-251</u></p>  <p>1.BASE 2.COLLECTOR 3.EMITTER</p> <p>Marking :D882M</p>	<p>Features</p> <ul style="list-style-type: none"> <li>• power switching applications</li> </ul>																																										
<p><b>MAXIMUM RATINGS (Ta=25°C unless otherwise noted)</b></p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Collector-Base Voltage</td> <td>VCBO</td> <td>40</td> <td>V</td> </tr> <tr> <td>Collector-Emitter Voltage</td> <td>VCEO</td> <td>30</td> <td>V</td> </tr> <tr> <td>Emitter-Base Voltage</td> <td>VEBO</td> <td>6</td> <td>V</td> </tr> <tr> <td>Collector Current -Continuous</td> <td>IC</td> <td>3</td> <td>A</td> </tr> <tr> <td>Collector Current -Pulsed</td> <td>ICM</td> <td>2</td> <td>A</td> </tr> <tr> <td>Collector Power Dissipation</td> <td>PC</td> <td>1.25</td> <td>W</td> </tr> <tr> <td>Thermal Resistance From Junction To Ambient</td> <td>RθJA</td> <td>125</td> <td>°C/W</td> </tr> <tr> <td>Junction Temperature</td> <td>Tj</td> <td>150</td> <td>°C</td> </tr> <tr> <td>Storage Temperature</td> <td>Tstg</td> <td>-55~+150</td> <td>°C</td> </tr> </tbody> </table>				Parameter	Symbol	Value	Unit	Collector-Base Voltage	VCBO	40	V	Collector-Emitter Voltage	VCEO	30	V	Emitter-Base Voltage	VEBO	6	V	Collector Current -Continuous	IC	3	A	Collector Current -Pulsed	ICM	2	A	Collector Power Dissipation	PC	1.25	W	Thermal Resistance From Junction To Ambient	RθJA	125	°C/W	Junction Temperature	Tj	150	°C	Storage Temperature	Tstg	-55~+150	°C
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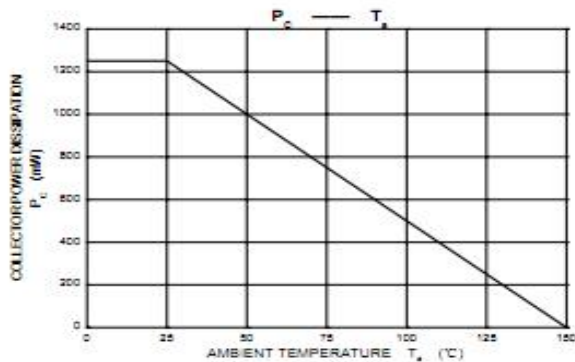
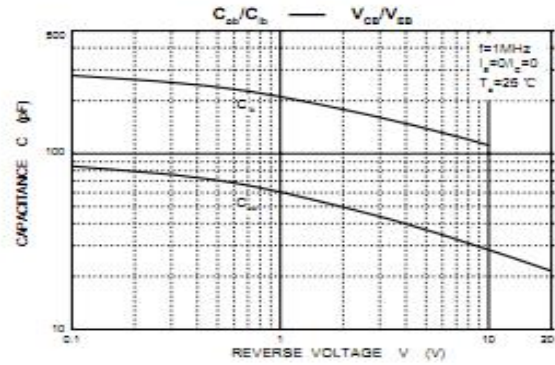
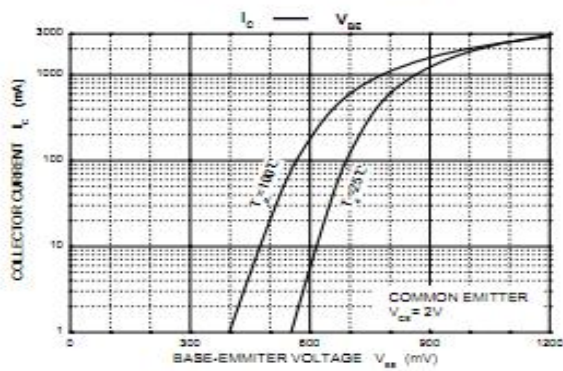
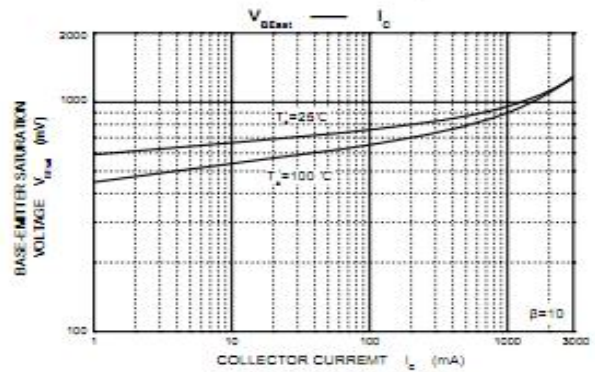
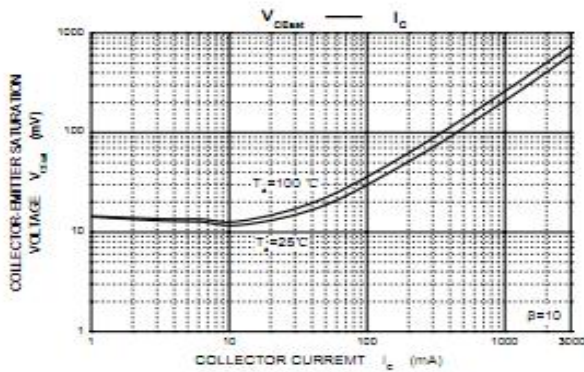
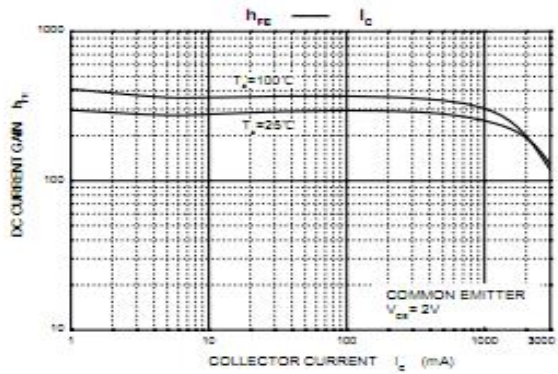
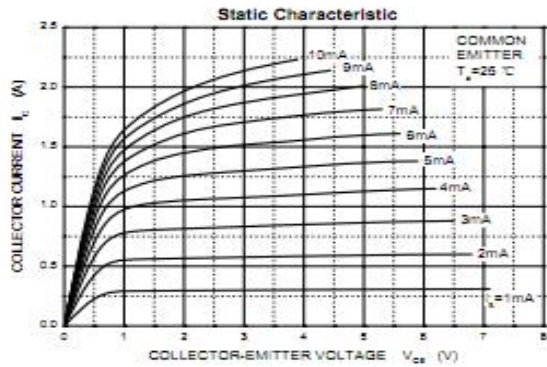
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 100μA, IE=0	40			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 10mA, IB=0	30			V
Emitter-base breakdown voltage	V(BR)EBO	IE= 100μA, IC=0	6			V
Collector cut-off current	ICBO	VCB= 40 V , IE=0			1	μA
Collector cut-off current	ICEO	VCE= 30V , IB=0			10	μA
Emitter cut-off current	IEBO	VEB= 6V , IC=0			1	μA
DC current gain	hFE	VCE= 2V, IC= 1A	60		400	
	hFE	VCE= 2V, IC= 500mA	100			
Collector-emitter saturation voltage	VCE(sat)	IC= 2A, IB= 0.2A			0.5	V
Base-emitter saturation voltage	VBE(sat)	IC= 2A, IB= 0.2A			1	V
Transition frequency	fT	VCE= 5V, IC= 0.1A f=1MHz	50	80		MHz
Fall time	tf	IC=1A, IB1=-IB2=0.2A VCC=100V			0.5	μs
Storage time	ts		1.5		4	μs

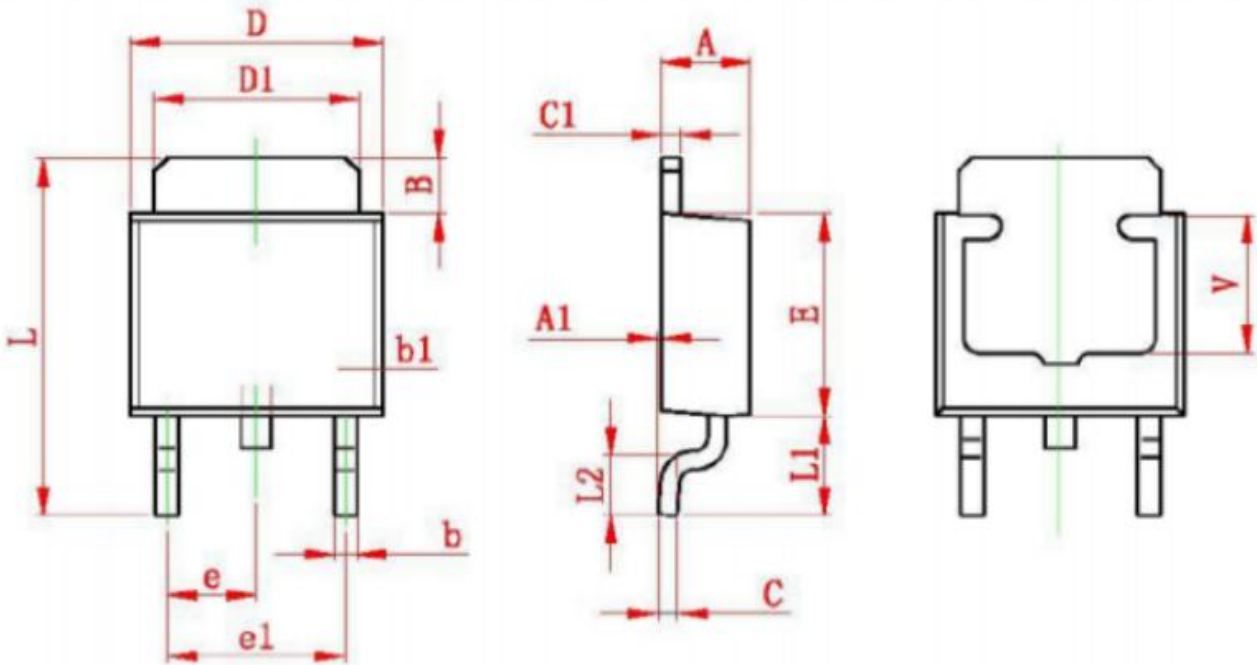
**CLASSIFICATION OF hFE**

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

**TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS**

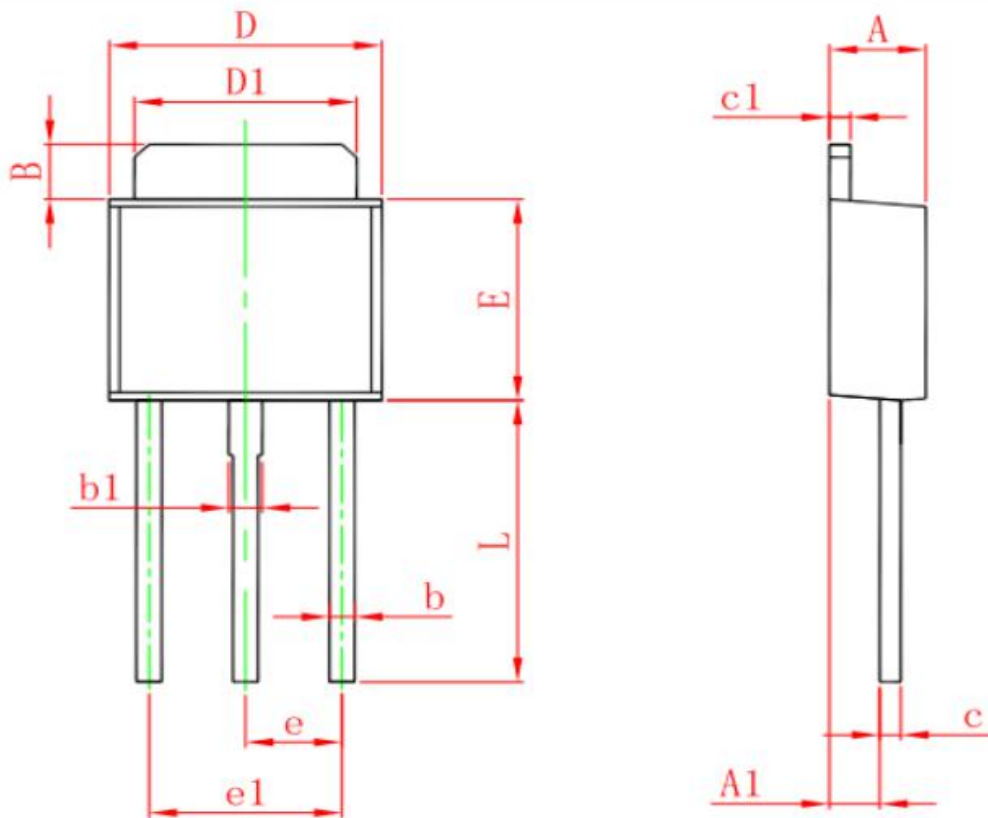


**TO-252 PACKAGA OUTLINE DIMENSIONS**



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	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP		0.091 TYP	
e1	4.500	4.700	0.177	0.185
L	9.500	9.900	0.374	0.390
L1	2.550	2.900	0.100	0.114
L2	1.400	1.780	0.055	0.070
V	3.80 REF		0.150 REF	

**TO-251 PACKAGA OUTLINE DIMENSIONS**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	1.050	1.350	0.042	0.054
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP.		0.091 TYP.	
e1	4.500	4.700	0.177	0.185
L	7.500	7.900	0.295	0.311