



HD122

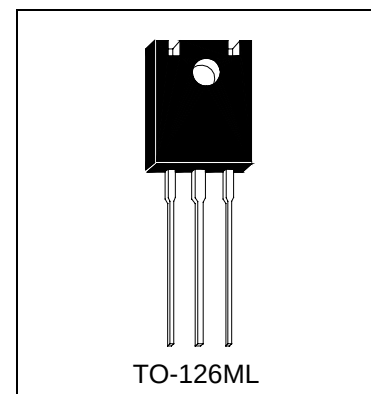
NPN EPITAXIAL SILICON DARLINGTON TRANSISTOR

Description

The HD122 is designed for medium power linear and switching applications.

Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
Storage Temperature -50 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Tc=25°C) 40 W
- Maximum Voltages and Currents
BVCBO Collector to Base Voltage 100 V
BVCEO Collector to Emitter Voltage 100 V
BVEBO Emitter to Base Voltage 5 V
IC Collector Current 5 A
IC Collector Current (Pulse) 6 A



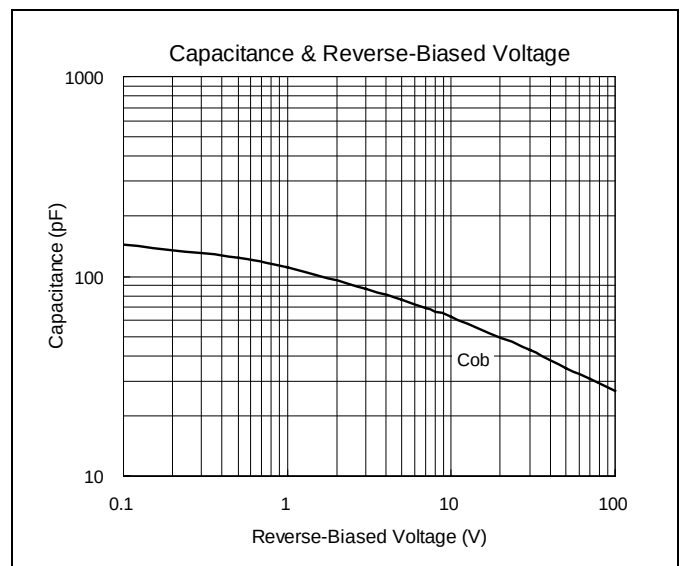
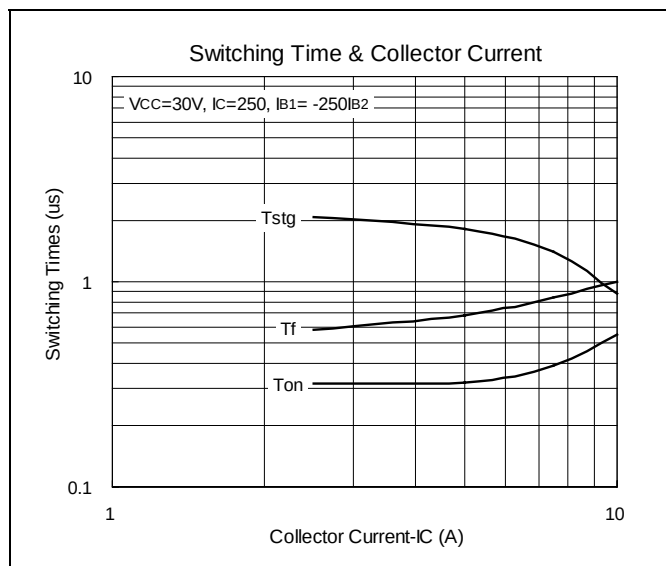
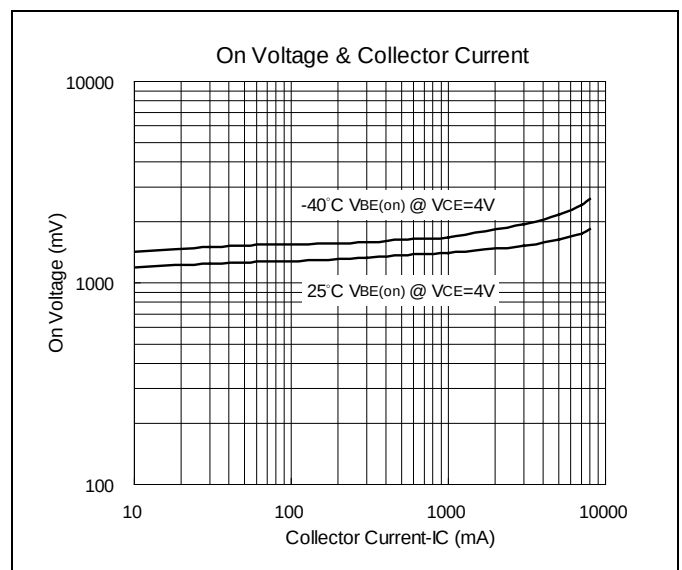
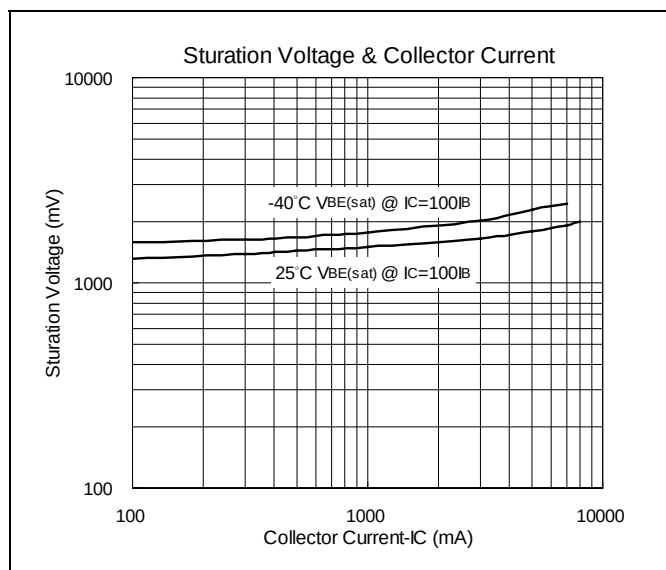
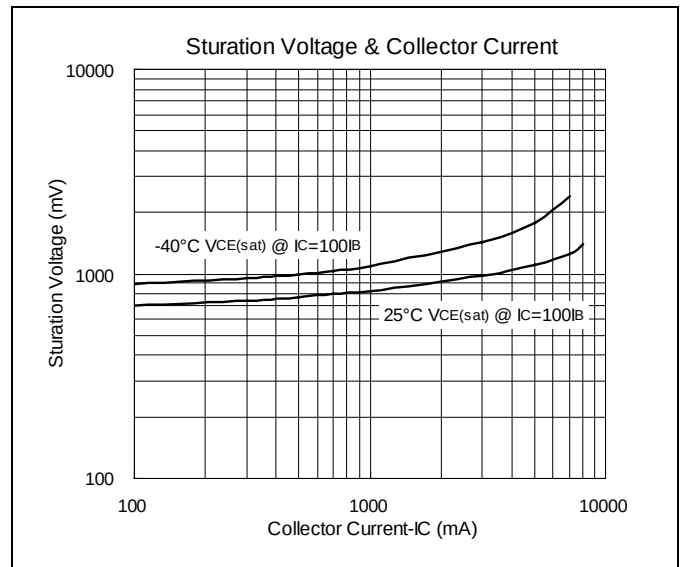
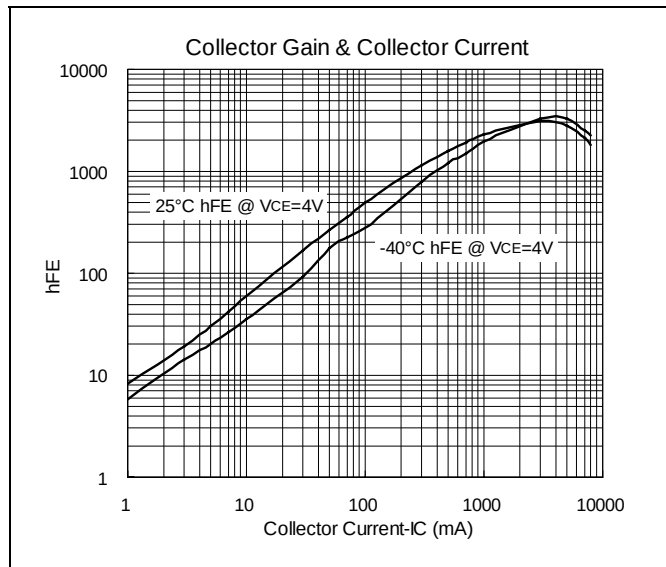
Electrical Characteristics (Ta=25°C)

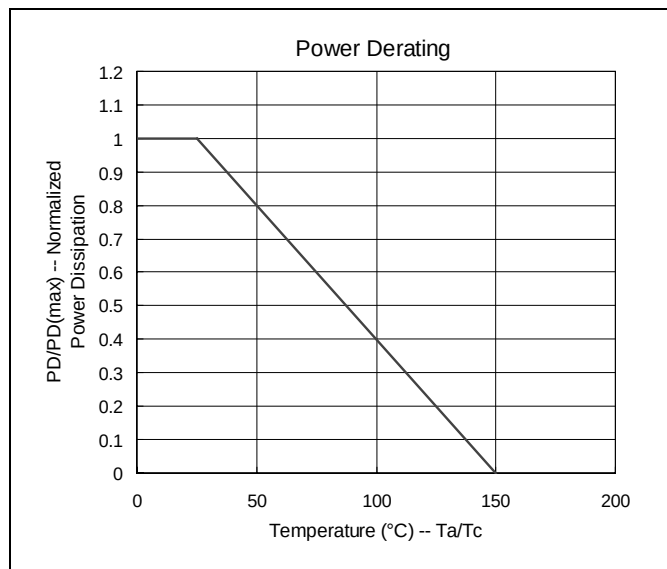
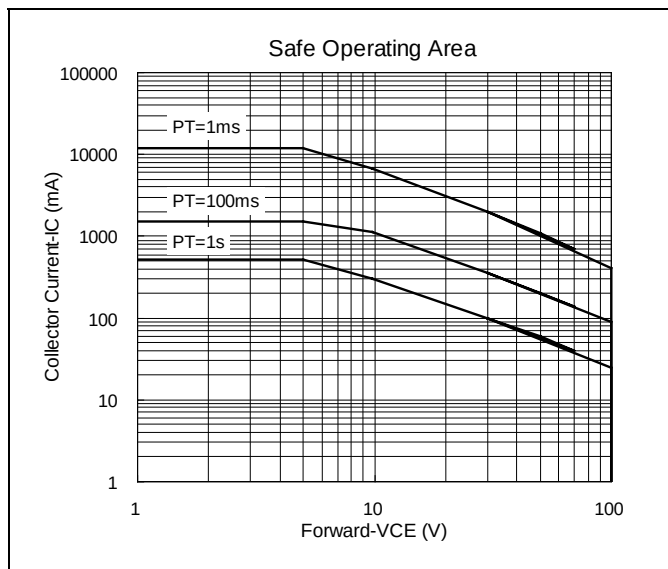
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA
*BVCEO	100	-	-	V	IC=100mA
BVEBO	5	-	-	V	IE=100uA
ICEO	-	-	2	mA	VCE=50V
ICBO	-	-	1	mA	VCB=100V
IEBO	-	-	2	mA	VBE=5V
*VCE(sat)1	-	-	2.5	V	IC=1.5A, IB=30mA
*VCE(sat)2	-	-	2.8	V	IC=2A, IB=40mA
*VBE(on)	-	-	2.5	V	IC=3A, VCE=3V
*hFE1	1000	-	-		IC=0.5A, VCE=3V
*hFE2	1000	-	-		IC=3A, VCE=3V

*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



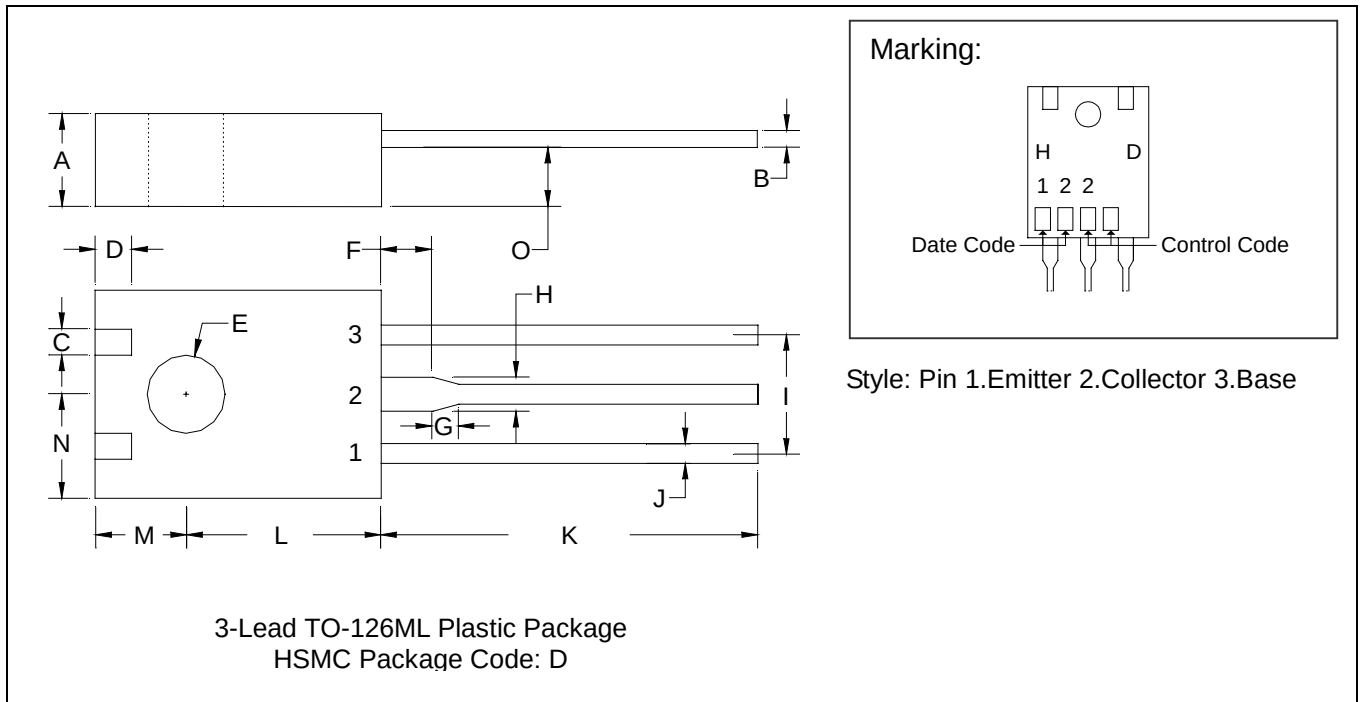
Characteristics Curve







TO-126ML Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1356	0.1457	3.44	3.70	I	-	*0.1795	-	*4.56
B	0.0170	0.0272	0.43	0.69	J	0.0268	0.0331	0.68	0.84
C	0.0344	0.0444	0.87	1.12	K	0.5512	0.5906	14.00	15.00
D	0.0501	0.0601	1.27	1.52	L	0.2903	0.3003	7.37	7.62
E	0.1131	0.1231	2.87	3.12	M	0.1378	0.1478	3.50	3.75
F	0.0737	0.0837	1.87	2.12	N	0.1525	0.1625	3.87	4.12
G	0.0294	0.0494	0.74	1.25	O	0.0740	0.0842	1.88	2.14
H	0.0462	0.0562	1.17	1.42					

Notes: 1.Dimension and tolerance based on our Spec. dated Mar. 6,1995.
2.Controlling dimension: millimeters.
3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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