

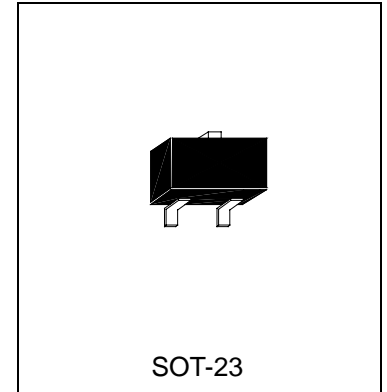


HMBT6427

NPN EPITAXIAL PLANAR TRANSISTOR

Description

Darlington Transistor



Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 225 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage 40 V
 VCEO Collector to Emitter Voltage..... 40 V
 VEBO Emitter to Base Voltage..... 12 V
 IC Collector Current 500 mA

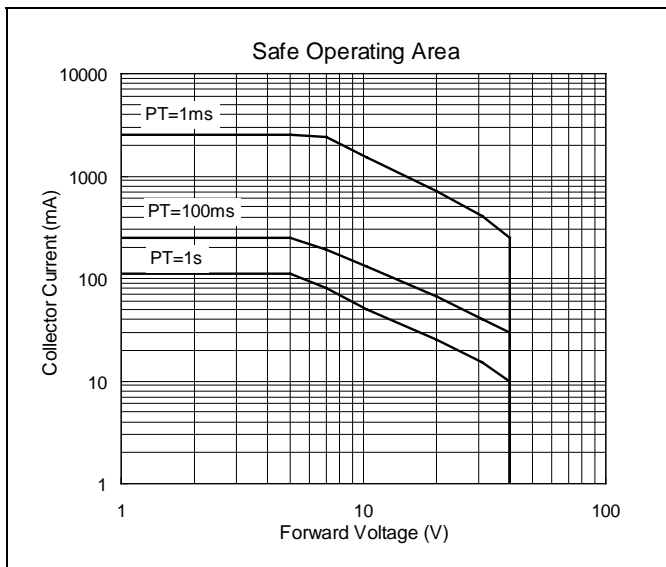
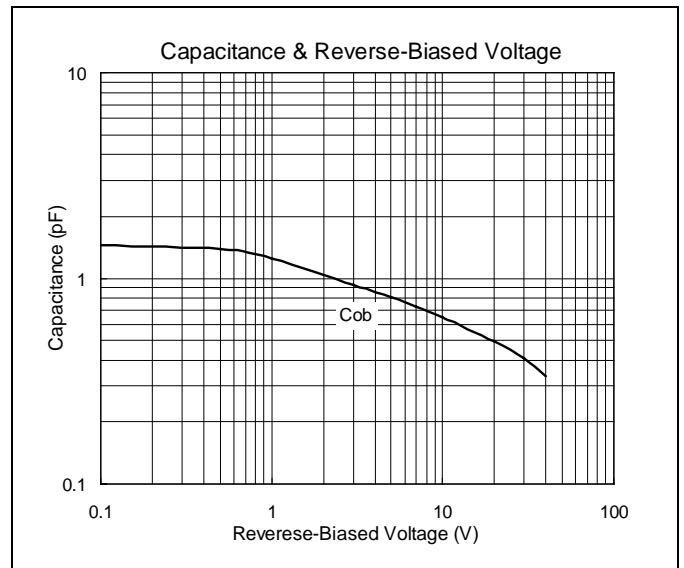
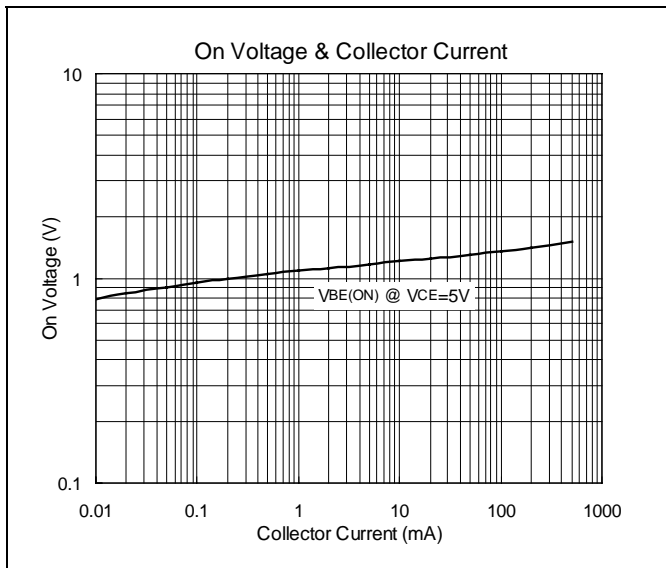
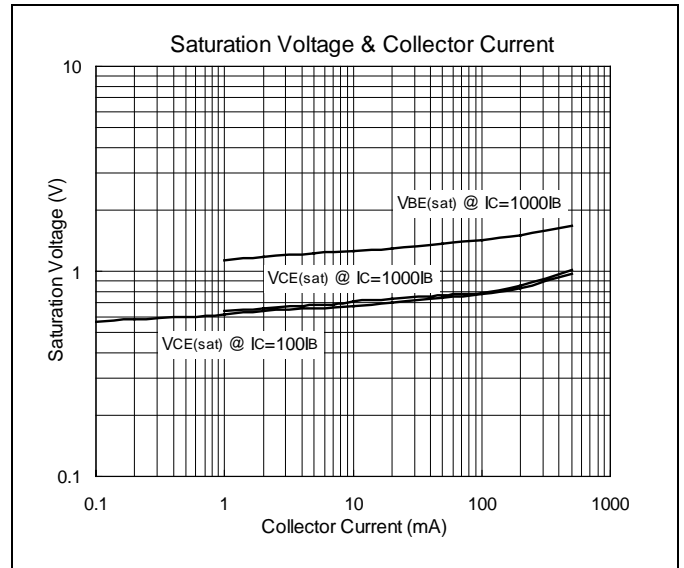
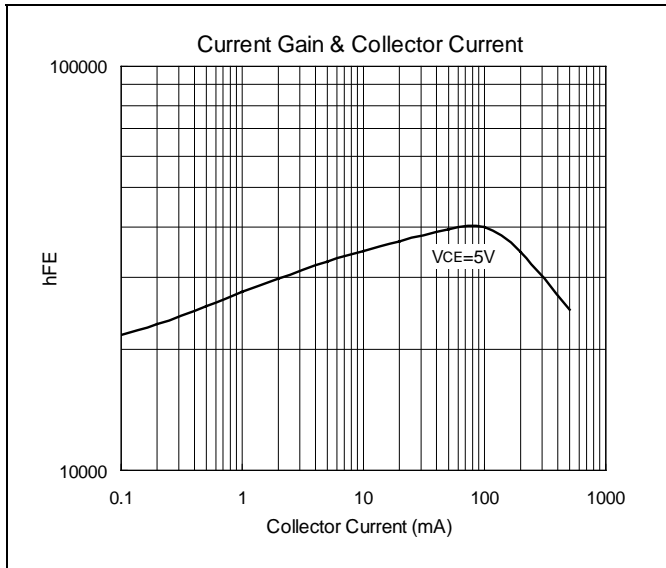
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA
BVCEO	40	-	-	V	IC=10mA
VEBO	12	-	-	V	IE=10uA
ICBO	-	-	50	nA	VCB=30V
ICEO	-	-	1	uA	VCB=25V
IEBO	-	-	50	nA	VEB=10V
*VCE(sat)1	-	-	1.2	V	IC=50mA, IB=0.5mA
*VCE(sat)2	-	-	1.5	V	IC=500mA, IB=0.5mA
*VBE(sat)	-	-	2	V	IC=500mA, IB=0.5mA
VBE(on)	-	-	1.75	V	VCE=5V, IC=50mA
*hFE1	10	-	100	K	VCE=5V, IC=10mA
*hFE2	20	-	200	K	VCE=5V, IC=100mA
*hFE3	14	-	140	K	VCE=5V, IC=500mA
Cob	-	-	7	pF	VCB=10V, f=1MHz

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

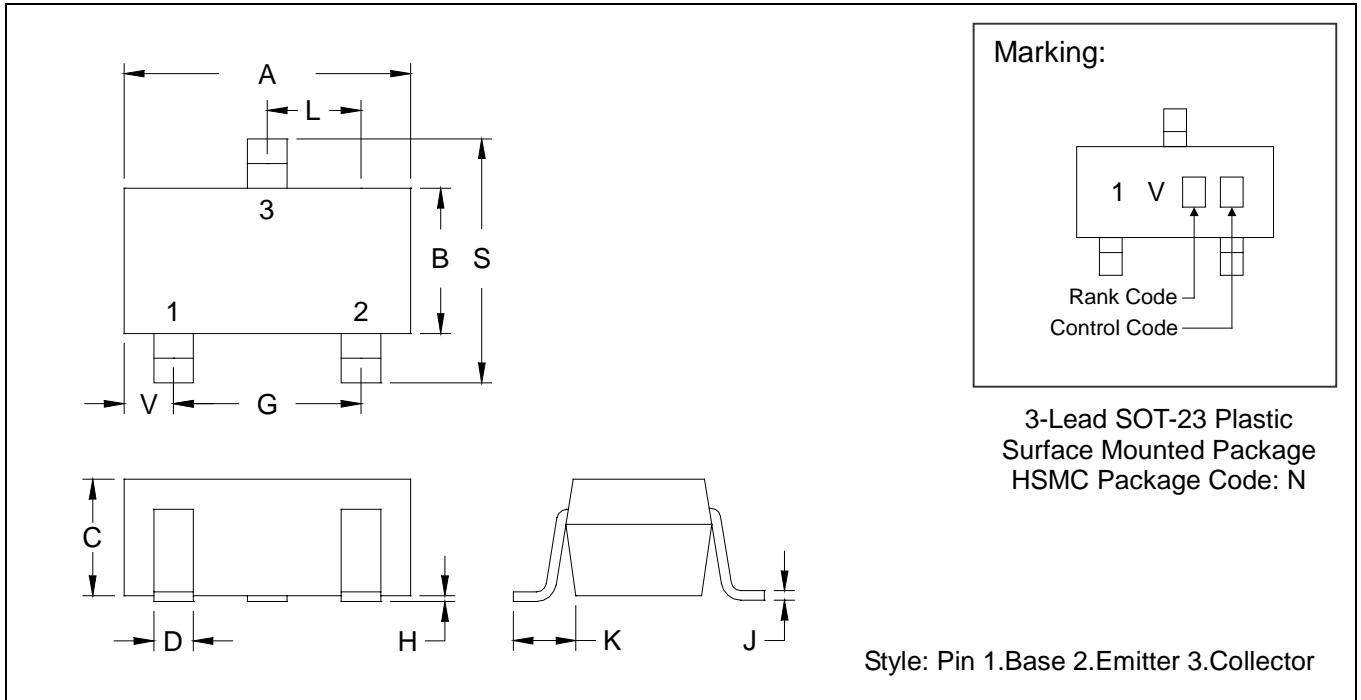


Characteristics Curve





SOT-23 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

- Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.
 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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