

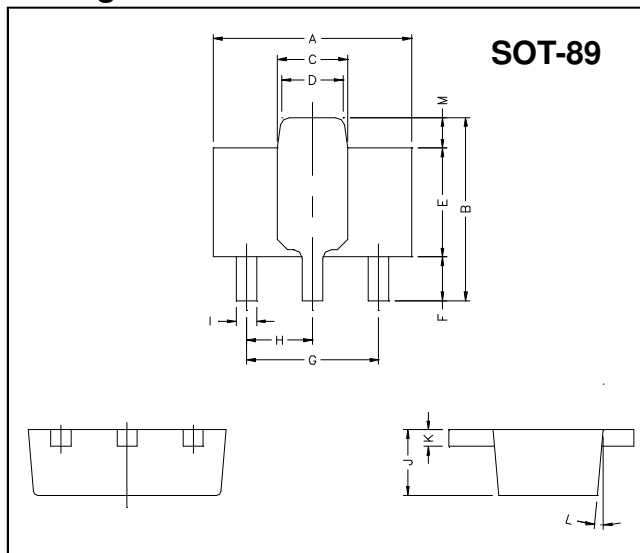
GMA14

NPN EPITAXIAL PLANAR TRANSISTOR

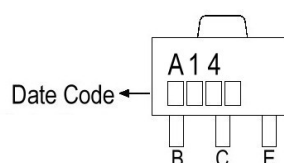
Description

The GMA14 is a Darlington amplifier transistor designed for applications requiring extremely high current gain.

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

Absolute Maximum Ratings at Ta = 25°C

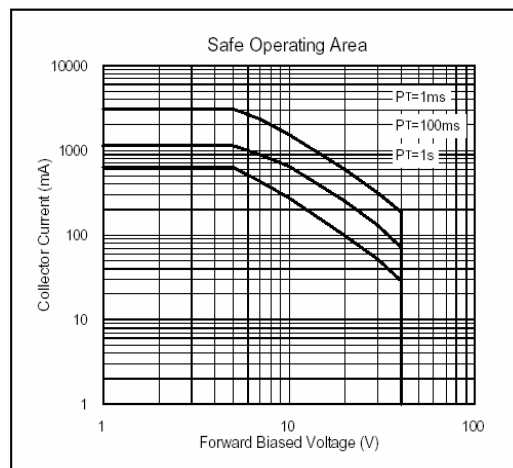
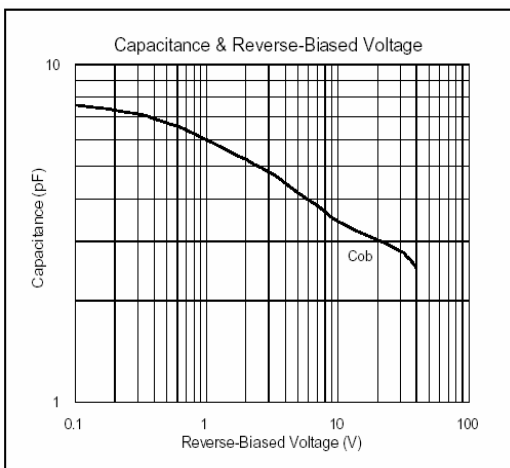
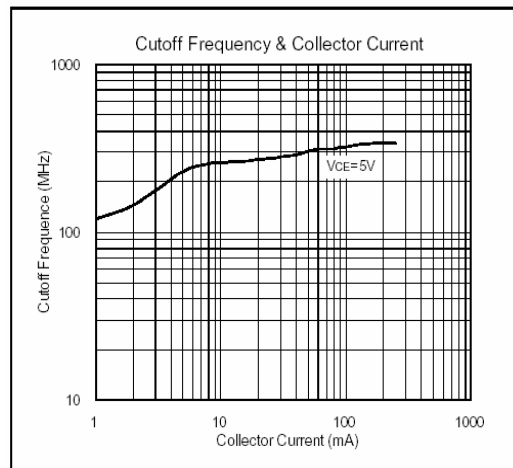
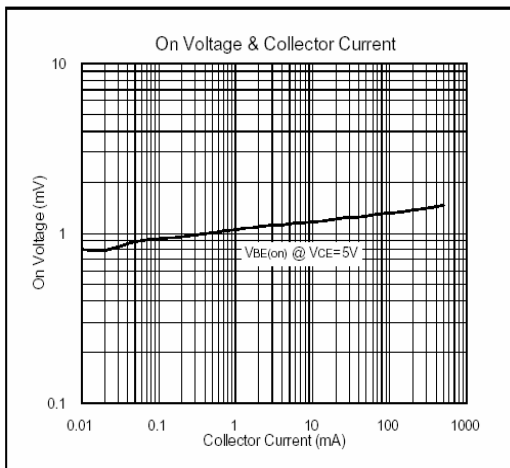
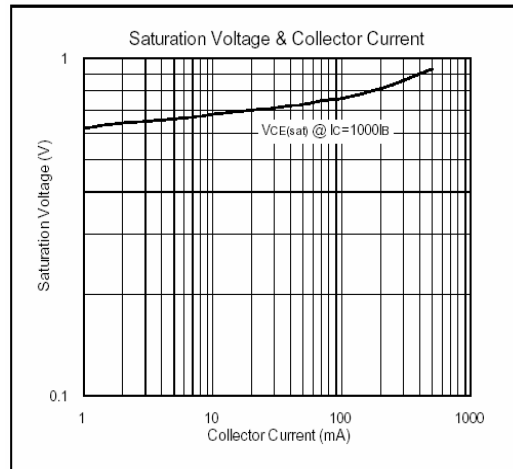
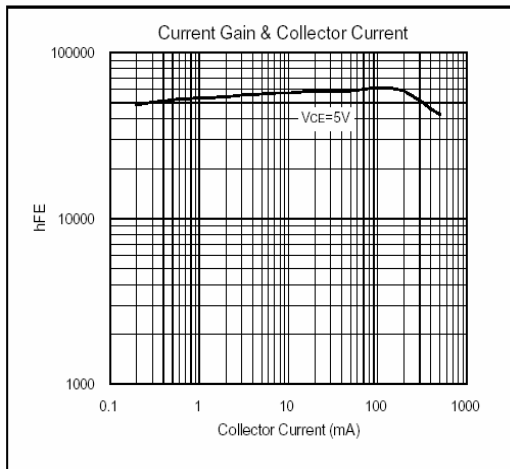
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55~+150	°C
Collector to Base Voltage	VCBO	30	V
Collector to Emitter Voltage	VCEO	30	V
Emitter to Base Voltage	VEBO	10	V
Collector Current	Ic	500	mA
Total Power Dissipation	PD	1	W

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

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	Ic=100uA, IE=0
BVCEO	30	-	-	V	Ic=100uA, IB=0
BVEBO	10	-	-	V	IE=10uA, Ic=0
ICBO	-	-	100	nA	VCB=30V, IE=0
IEBO	-	-	100	nA	VEB=10V, Ic=0
*VCE(sat)	-	-	1.5	V	Ic=100mA, IB=0.1mA
*VBE(on)	-	-	2.0	V	VCE=5V, Ic=100mA
*hFE1	10K	-	-		VCE=5V, Ic=10mA
*hFE2	20K	-	-		VCE=5V, Ic=100mA
fT	125	-	-	MHz	VCE=5V, Ic=10mA, f=100MHz
Cob	-	-	6	pF	VCB=10V, IE=0, f=1MHz

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

Characteristics Curve



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