

GL9401A

NPN SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

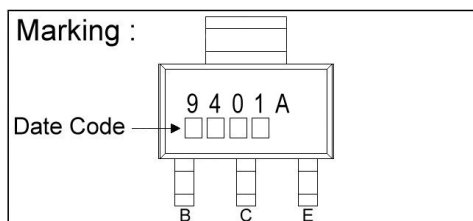
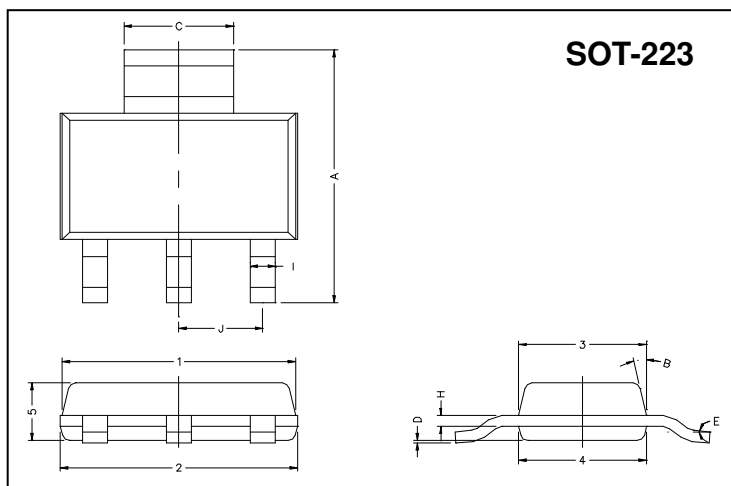
Description

The GL9401A is designed for general purpose switching and amplifier applications.

Features

- 5 Amps continuous current, up to 20Amps pulse current
- Low saturation voltages
- High Gain

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13°TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

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	80	V
Collector to Emitter Voltage	Vceo	30	V
Emitter to Base Voltage	Vebo	5	V
Collector Current (DC)	Ic	5	A
Collector Current (Pulse)	Icm	20	A
Total Power Dissipation	Pd	2.5	W

*The power which can be dissipated assuming the device is mounted in typical manner on a PCB with copper equal to 2 inches x 2 inches.

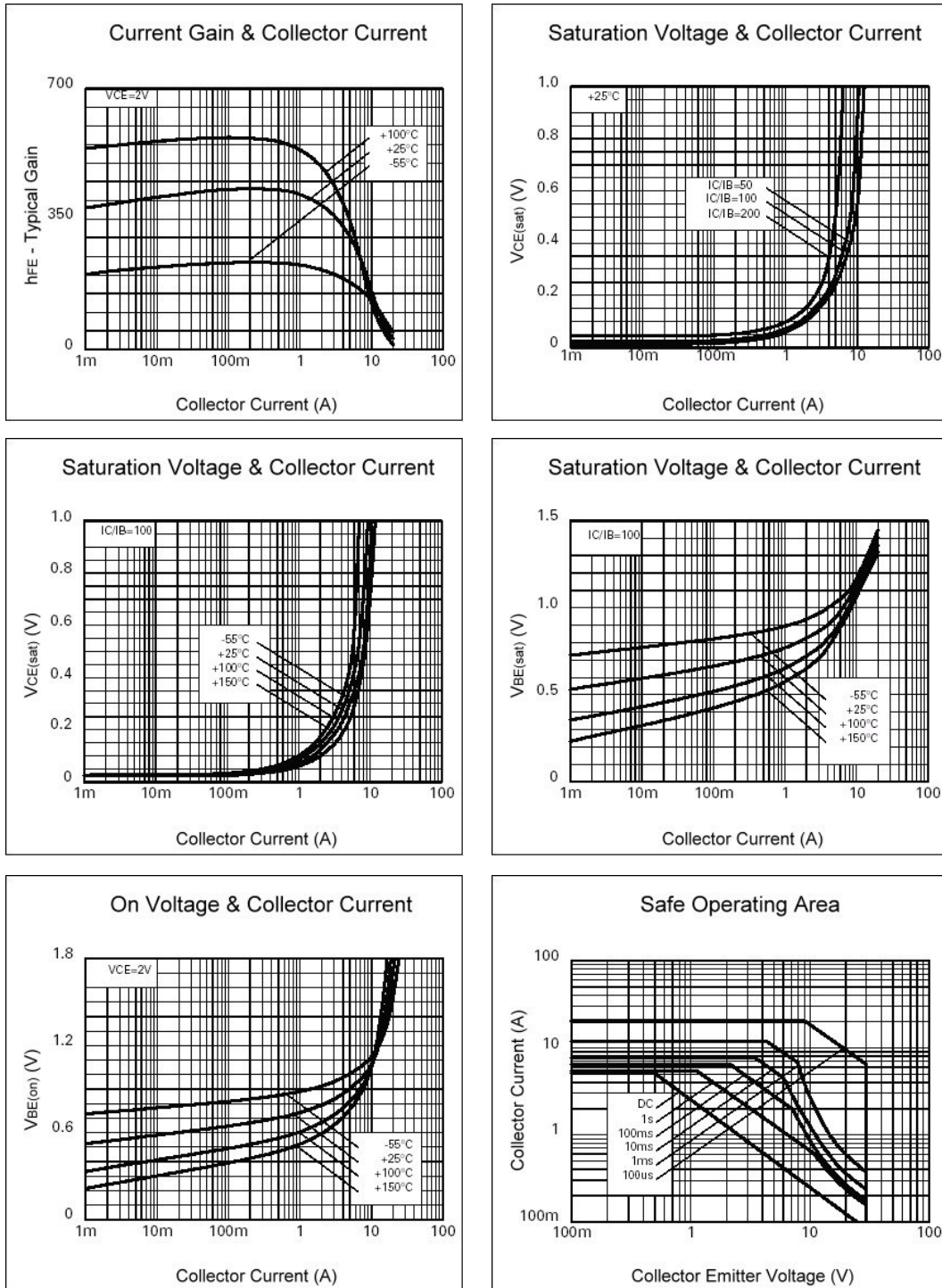
Electrical Characteristics (Ta = 25°C, unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVcbo	80	-	-	V	Ic=100uA, Ie=0
*BVces	80	-	-	V	Ic=100uA
BVceo	30	-	-	V	Ic=10mA, Ib=0
BVcev	80	-	-	V	Ic=10uA, VEB=1V
BVebo	5	-	-	V	Ie=100uA, Ic=0
Icbo	-	-	10	nA	Vcb=35V, Ie=0
ICES	-	-	10	nA	Vces=35V
Iebo	-	-	10	nA	VEB=4V, Ic=0
*VCE(sat)1	-	-	60	mV	Ic=500mA, Ib=10mA
*VCE(sat)2	-	-	100	mV	Ic=1A, Ib=10mA
*VCE(sat)3	-	-	250	mV	Ic=3A, Ib=30mA
*VCE(sat)4	-	-	330	mV	Ic=5A, Ib=50mA
*VBE(sat)	-	-	1.05	V	Ic=5A, Ib=50mA
*VBE(on)	-	-	1.0	V	VCE=2V, Ic=5A
*hFE1	280	-	-		VCE=2V, Ic=10mA
*hFE2	300	-	-		VCE=2V, Ic=0.5A
*hFE3	300	-	1200		VCE=2V, Ic=1A
*hFE4	180	-	-		VCE=2V, Ic=5A

*hFE5	40	-	-		VCE=2V, IC=20A
fT	-	180	-	MHz	VCE=10V, IC=50mA, f=100MHz
Cob	-	45	60	pF	VCB=10V, IE=0, f=1MHz
ton	-	125	-	ns	VCC=10V, IC=4A, IB1=IB2=40mA
toff	-	380	-		

*Measured under pulse condition. Pulse width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Characteristics Curve



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