

GL1501A

NPN SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

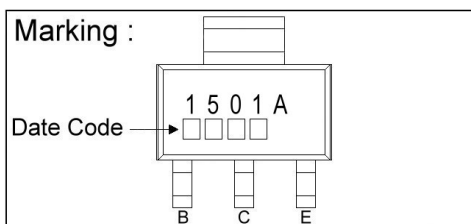
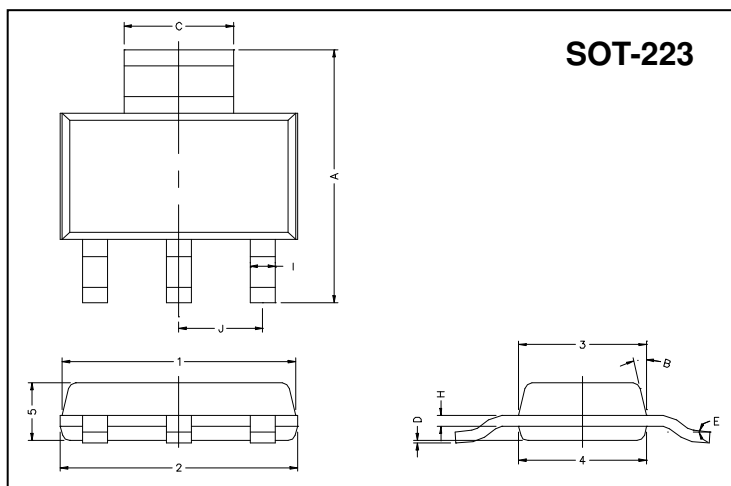
Description

The GL1501A is designed for general purpose switching and amplifier applications.

Features

- 5 Amps continuous current, up to 10Amps 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	150	V
Collector to Emitter Voltage	VCEO	40	V
Emitter to Base Voltage	VEBO	5	V
Collector Current (DC)	IC	5	A
Collector Current (Pulse)	ICM	10	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.

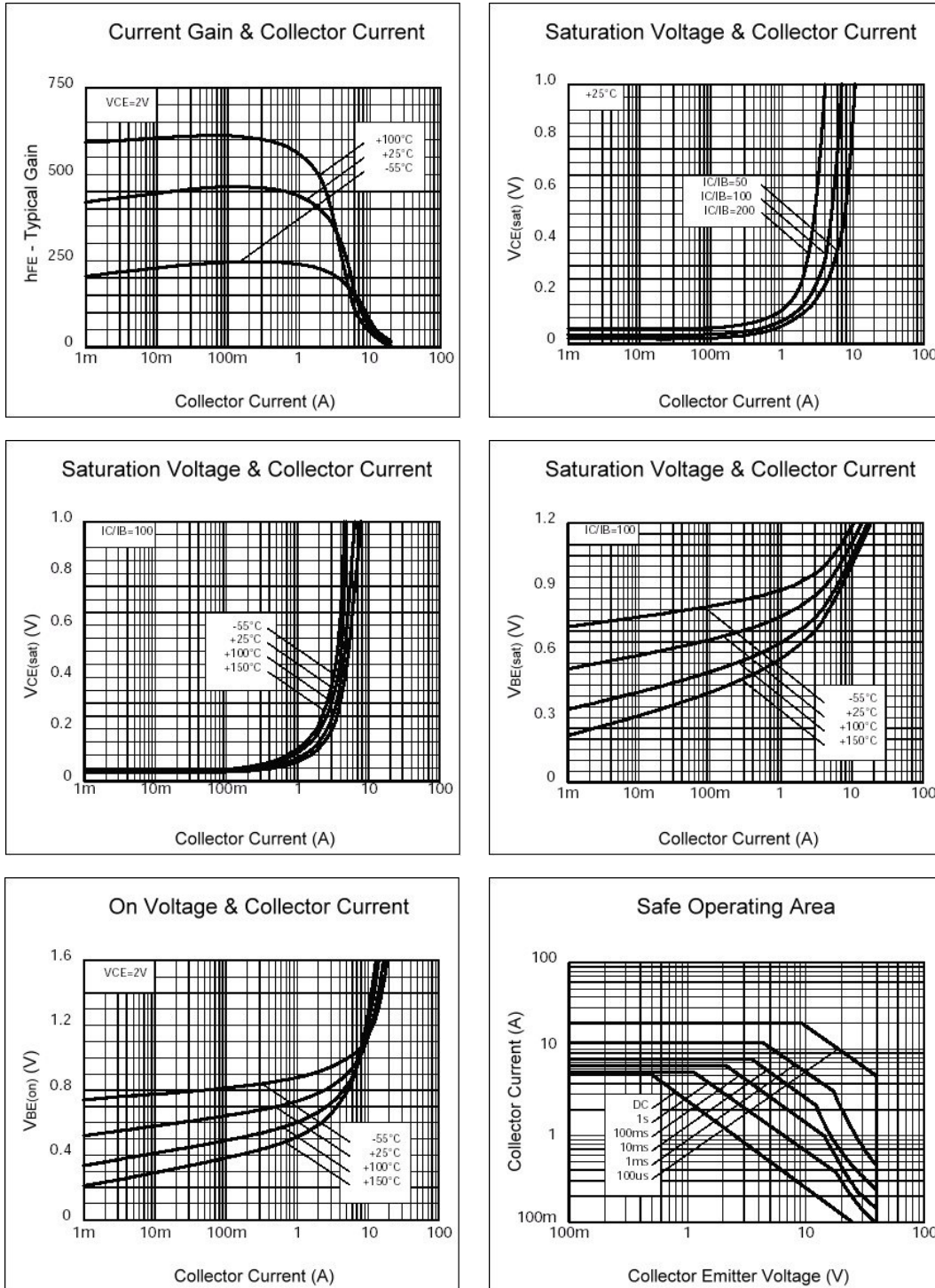
Electrical Characteristics (Ta = 25°C, unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	150	-	-	V	IC=100uA, IE=0
*BVCEs	150	-	-	V	IC=100uA
BVCEO	40	-	-	V	IC=10mA, IB=0
BVCEV	150	-	-	V	IC=100uA, VEB=1V
BVEBO	5	-	-	V	IE=100uA, IC=0
ICBO	-	-	10	nA	VCB=120V, IE=0
ICES	-	-	10	nA	VCEs=120V
IEBO	-	-	10	nA	VEB=4V, IC=0
*VCE(sat)1	-	-	25	mV	IC=200mA, IB=10mA
*VCE(sat)2	-	-	120	mV	IC=1A, IB=10mA
*VCE(sat)3	-	-	180	mV	IC=2A, IB=20mA
*VCE(sat)4	-	-	340	mV	IC=5A, IB=100mA
*VBE(sat)	-	-	1.1	V	IC=5A, IB=100mA
*VBE(on)	-	-	1.0	V	VCE=2V, IC=5A
*hFE1	290	-	-		VCE=2V, IC=10mA
*hFE2	270	-	1200		VCE=2V, IC=1A
*hFE3	130	-	-		VCE=2V, IC=5A
*hFE4	40	-	-		VCE=2V, IC=10A

fT	-	155	-	MHz	VCE=10V, IC=50mA, f=100MHz
Cob	-	27	40	pF	VCE=10V, IE=0, f=1MHz
ton	-	220	-	ns	VCC=10V, IC=3A, IB1=IB2=30mA
toff	-	540	-		

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

Characteristics Curve



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