

# GTM CORPORATION

ISSUED DATE :2004/12/27  
REVISED DATE :

## GMPSA14

NPN SILICON DARLINGTON TRANSISTOR

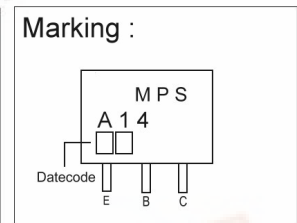
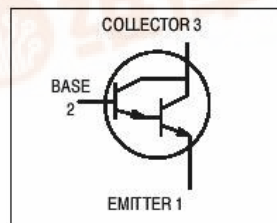
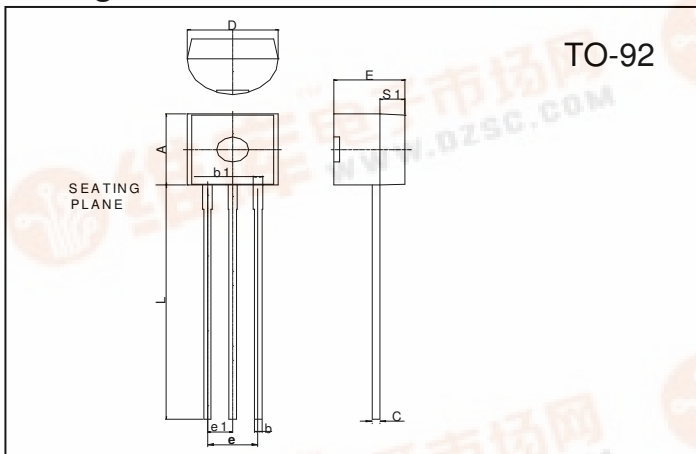
### Description

The GMPSA14 is designed for darlington applications requiring extremely high current gain at collector to 500mA.

### Features

- \*High D.C. Current Gain
- \*Complementary to GMPSA64

### Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

### Absolute Maximum Ratings at Ta = 25°C

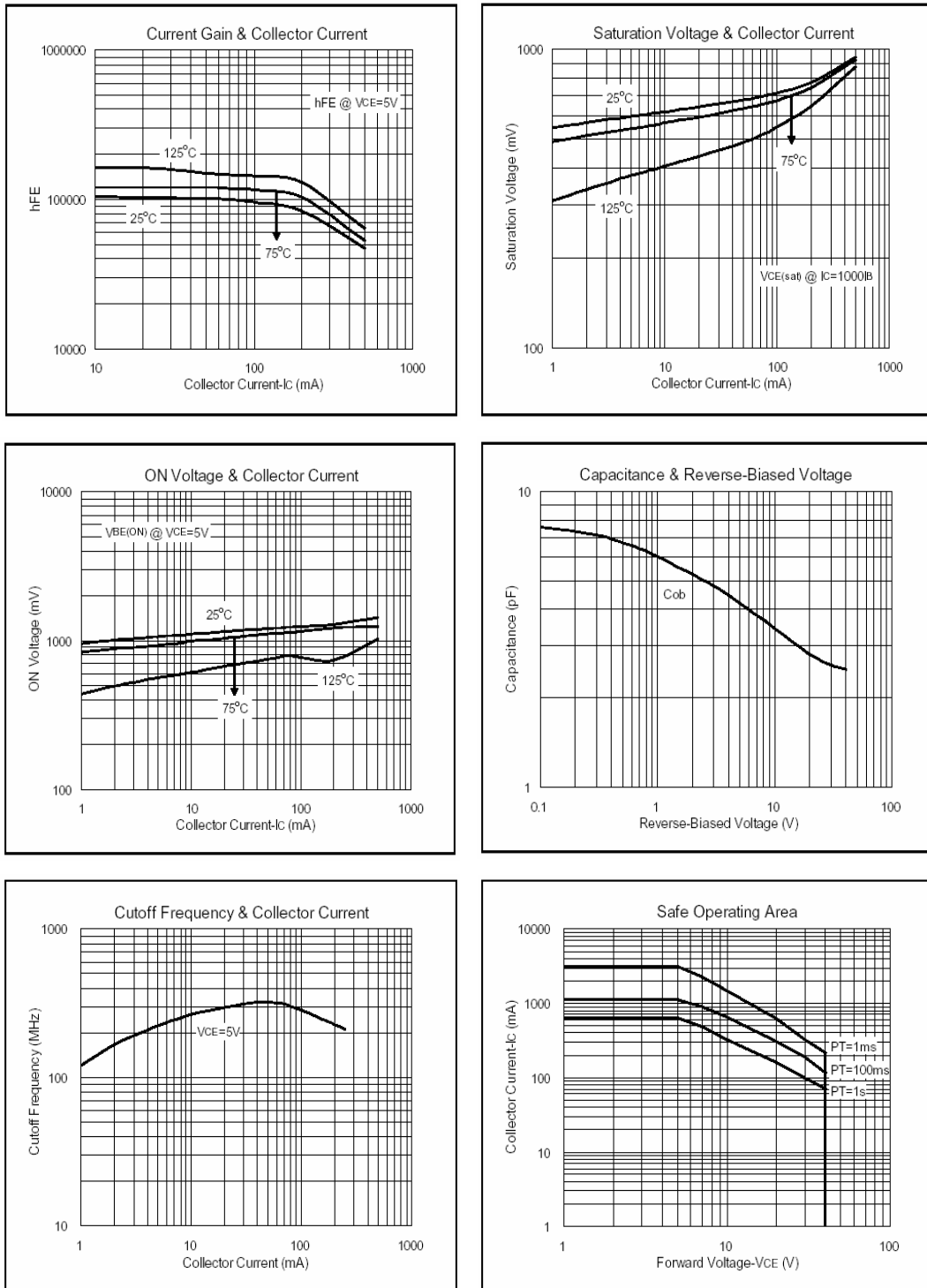
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage	VCBO	30	V
Collector to Emitter Voltage	VCES	30	V
Emitter to Base Voltage	VEBO	10	V
Collector Current	Ic	500	mA
Total Power Dissipation	PD	625	mW

### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	Ic=100uA, IE=0
BVCES	30	-	-	V	Ic=100uA, VBE=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	10	-	-	K	VCE=5V, Ic=10mA
*hFE2	20	-	-	K	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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