



# 2SA1593/2SC4135

## Bipolar Transistor (-)100V, (-)2A, Low VCE(sat), (PNP)NPN Single TP/TP-FA

ON Semiconductor®

<http://onsemi.com>

### Applications

- Power supplies, relay drivers, lamp drivers

### Features

- Adoption of FBET, MBIT processes
- High breakdown voltage and large current capacity
- Fast switching speed
- Small and slim package permitting 2SA1593/2SC4135-applied sets to be made more compact

### Specifications ( ) : 2SA1593

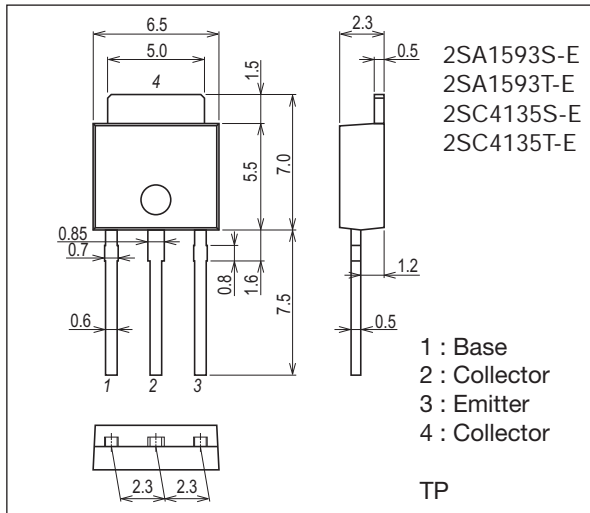
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CB0</sub>		(-)120	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>		(-)100	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		(-)6	V
Collector Current	I <sub>C</sub>		(-)2	A
Collector Current (Pulse)	I <sub>CP</sub>		(-)3	A

Continued on next page.

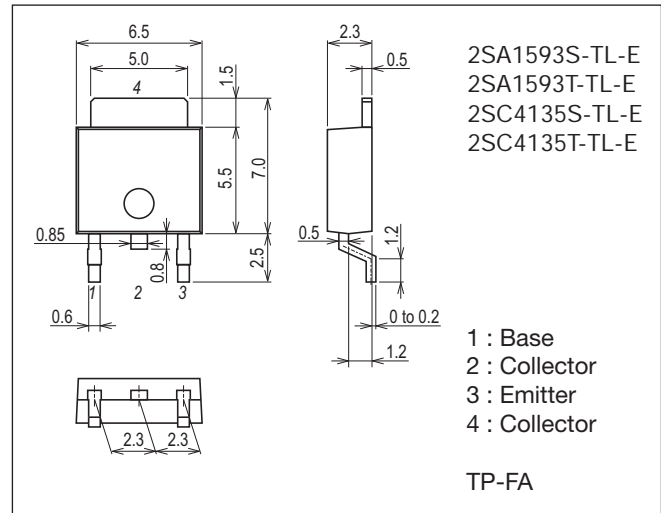
### Package Dimensions unit : mm (typ)

7518-003



### Package Dimensions unit : mm (typ)

7003-003

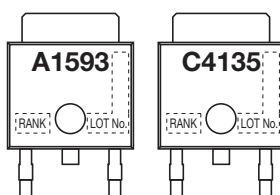


### Product & Package Information

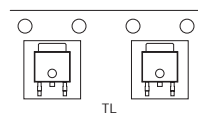
- Package : TP
- JEITA, JEDEC : SC-64, TO-251
- Minimum Packing Quantity : 500 pcs./bag

- Package : TP-FA
- JEITA, JEDEC : SC-63, TO-252
- Minimum Packing Quantity : 700 pcs./reel

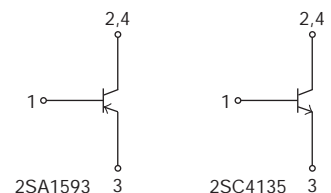
### Marking (TP, TP-FA)



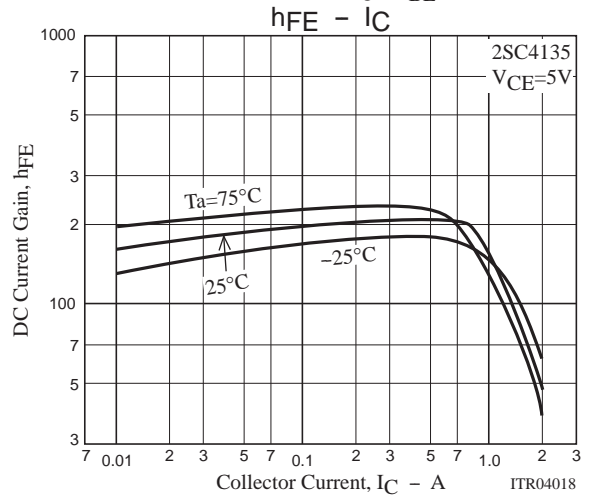
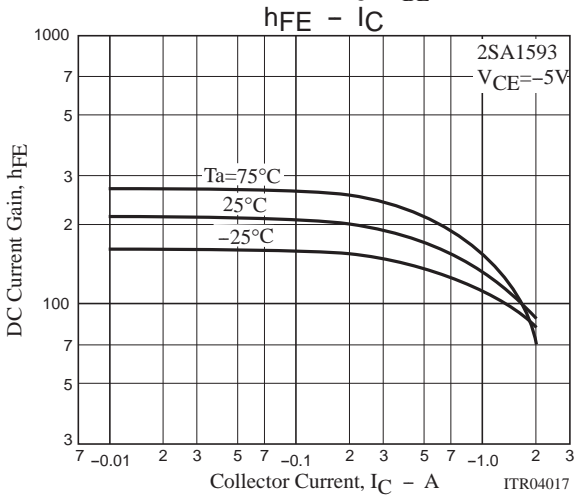
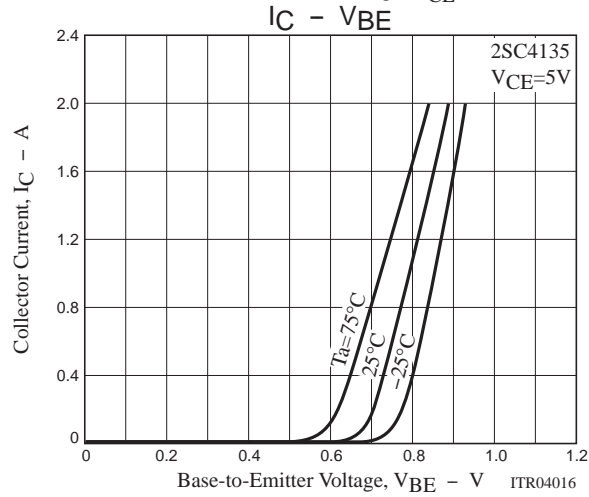
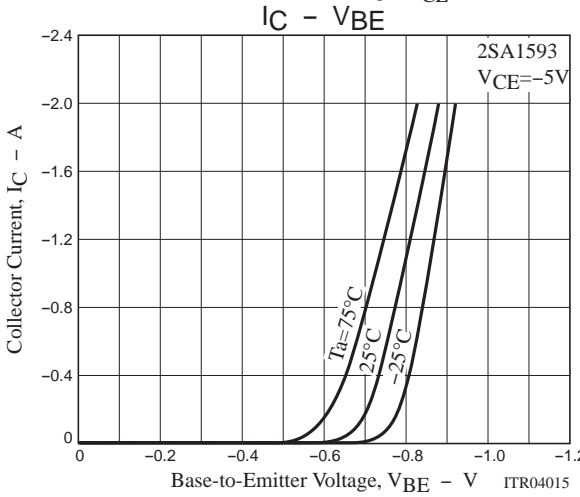
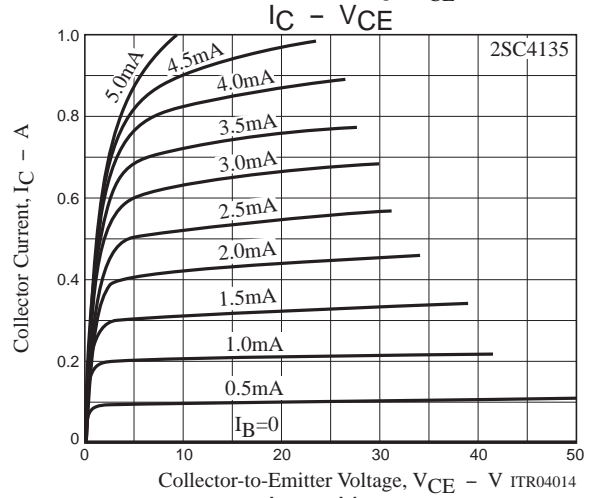
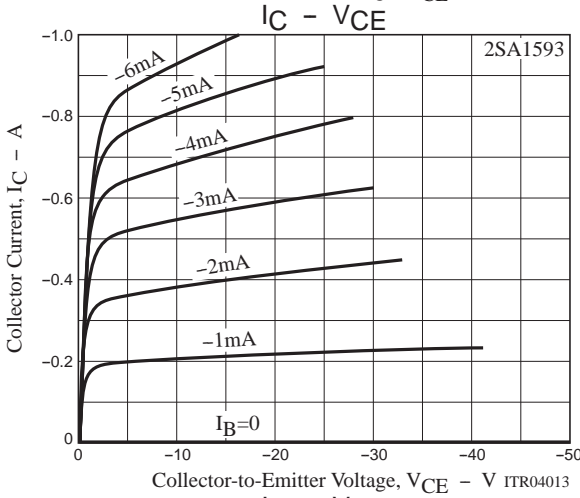
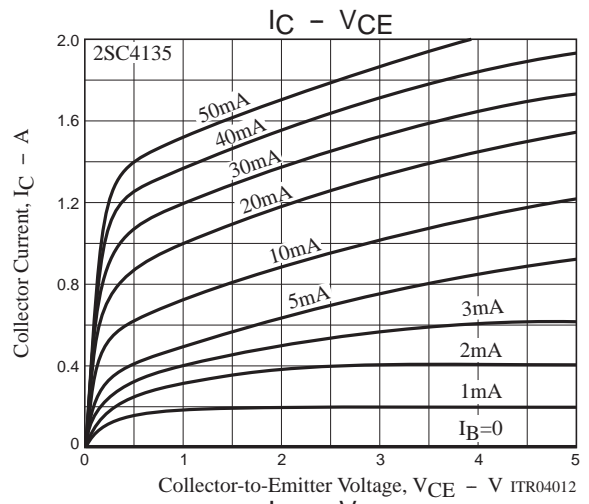
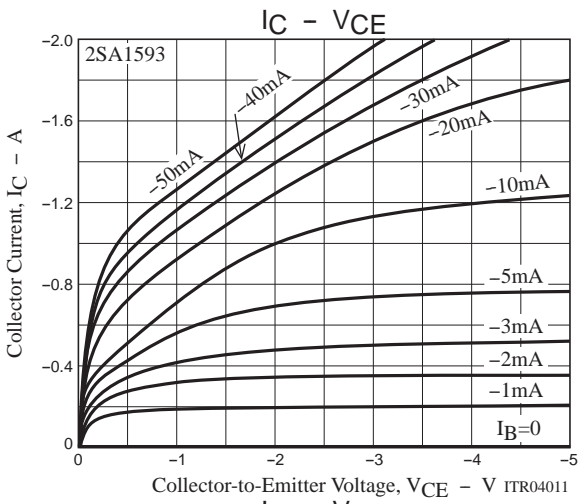
### Packing Type (TP-FA) : TL



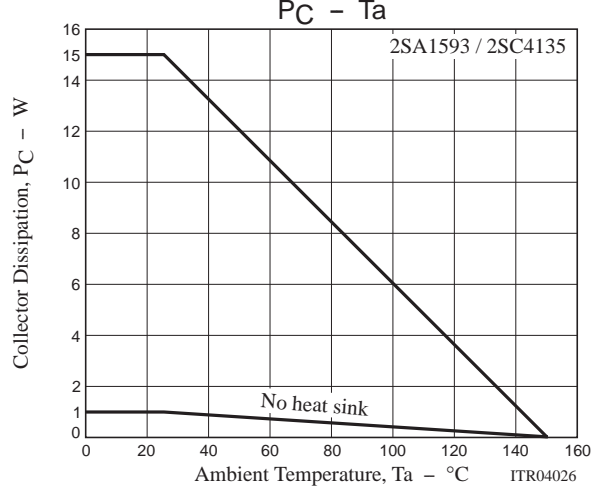
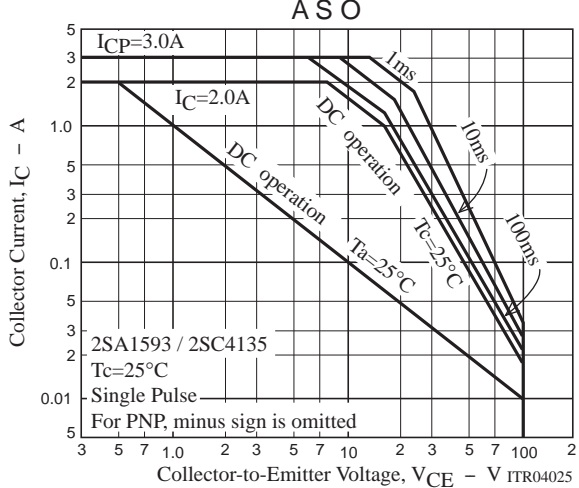
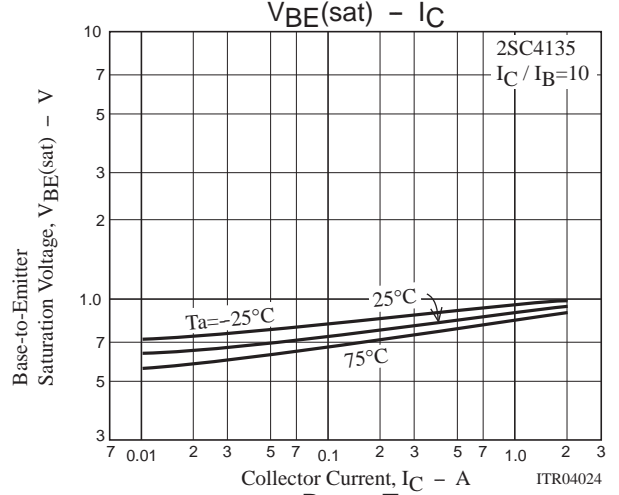
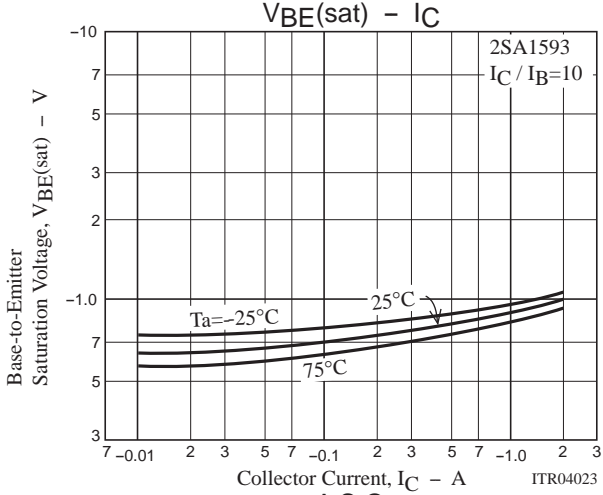
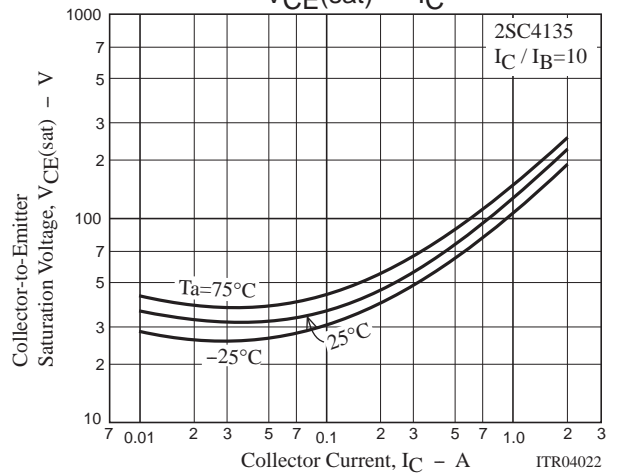
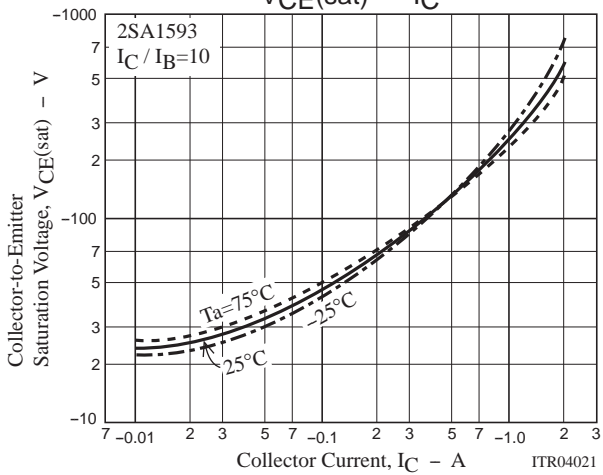
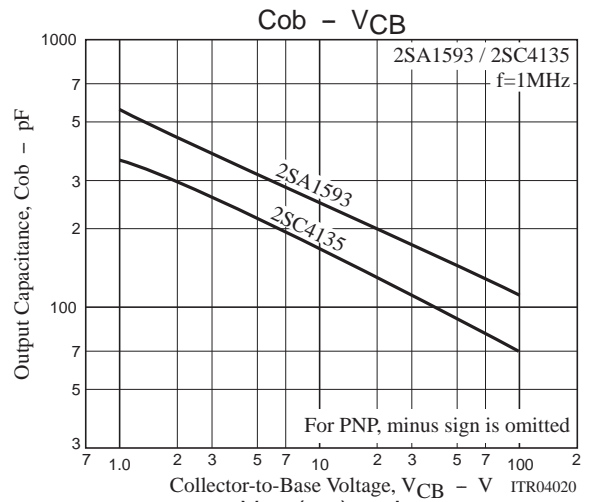
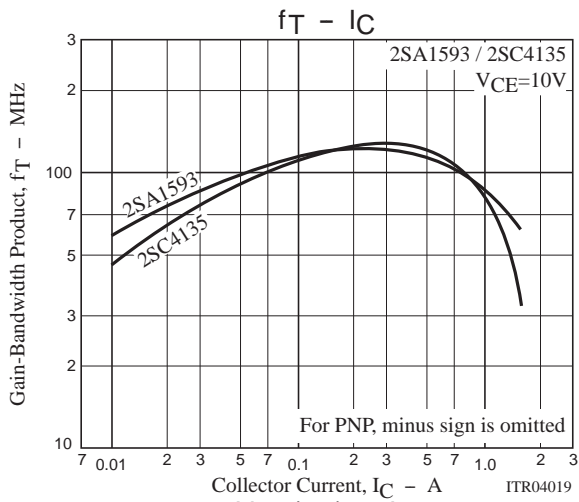
### Electrical Connection







2SA1593 / 2SC4135



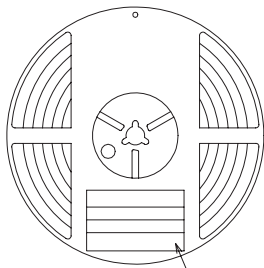
Taping Specification

2SA1593S-TL-E, 2SA1593T-TL-E, 2SC4135S-TL-E, 2SC4135T-TL-E

Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
TP-FA	TP	700	2,100	12,600	3 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

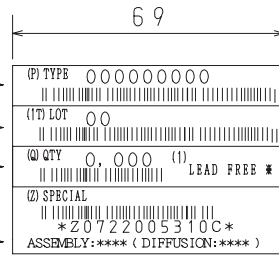
Packing method



Reel label

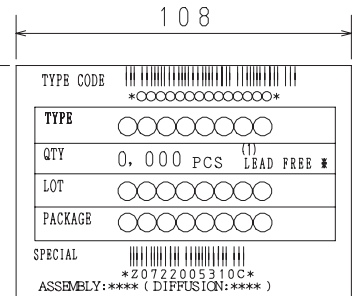
Type No.  
LOT No.  
Quantity  
Origin

Reel label, Inner box label (unit:mm)



Outer box label

It is a label at the time of factory shipments. The form of a label may change in physical distribution process.



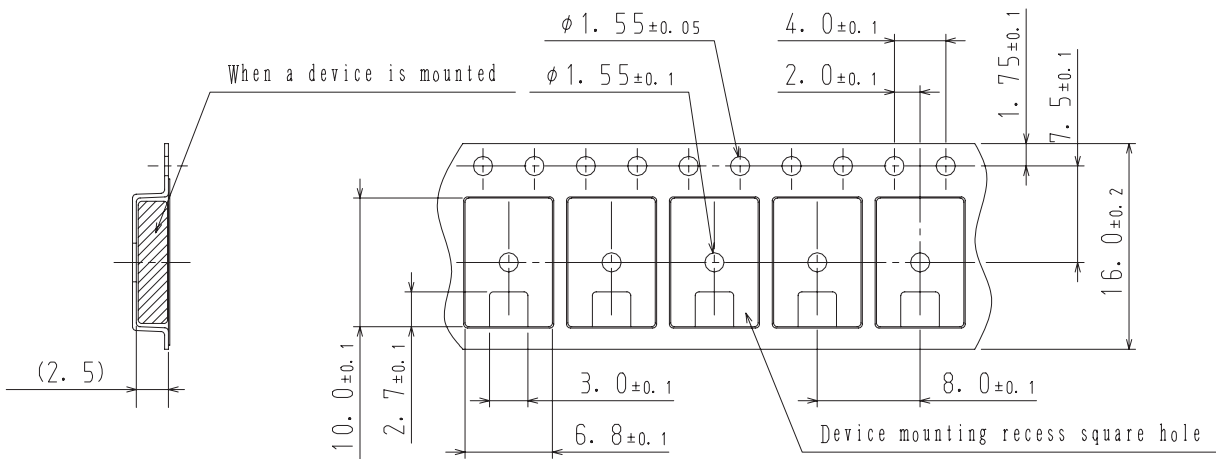
NOTE (1)

The LEAD FREE \* description shows that the surface treatment of the terminal is lead free.

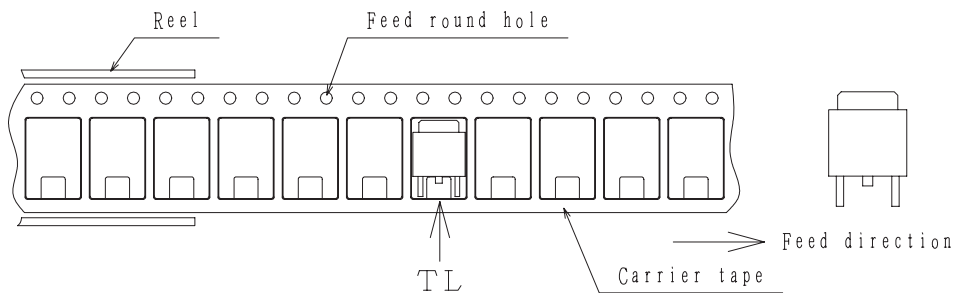
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

Taping configuration

1. Carrier tape size (unit:mm)



2. Device placement direction



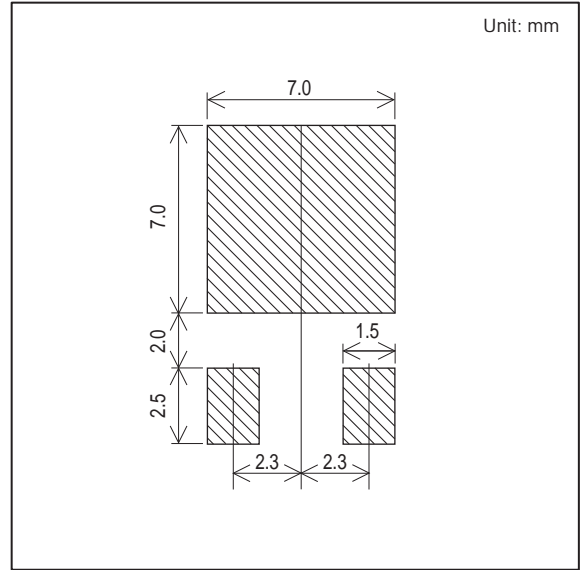
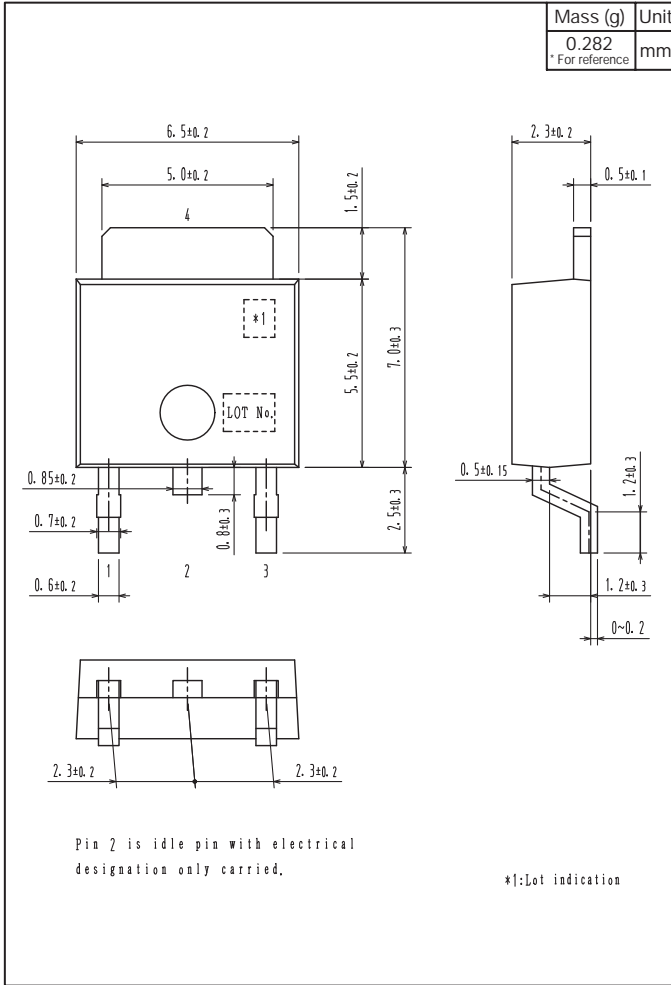
Those with one electrode terminal on the feed hole side.....TL

2SA1593 / 2SC4135

Outline Drawing

Land Pattern Example

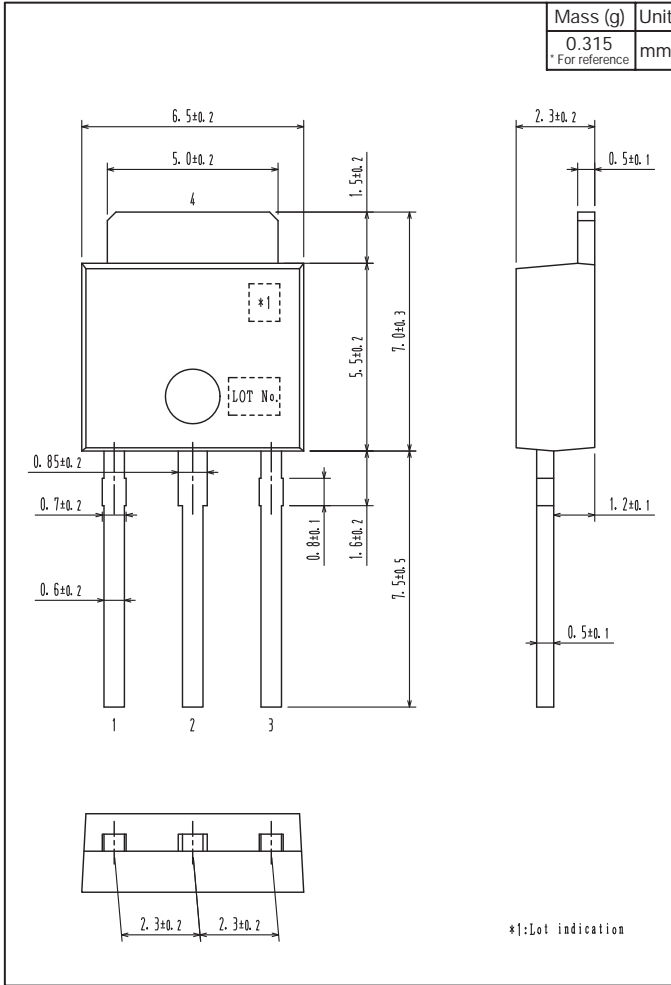
2SA1593S-TL-E, 2SA1593T-TL-E, 2SC4135S-TL-E, 2SC4135T-TL-E





Outline Drawing

2SA1593S-E, 2SA1593T-E, 2SC4135S-E, 2SC4135T-E





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