



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SFT1341 — P-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

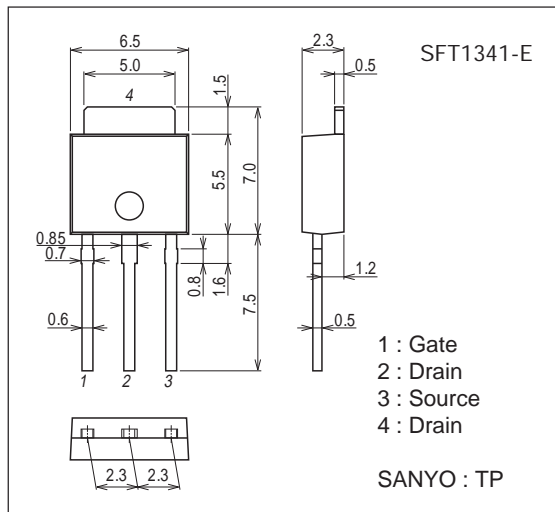
- 1.8V drive
- Protection diode in

Specifications

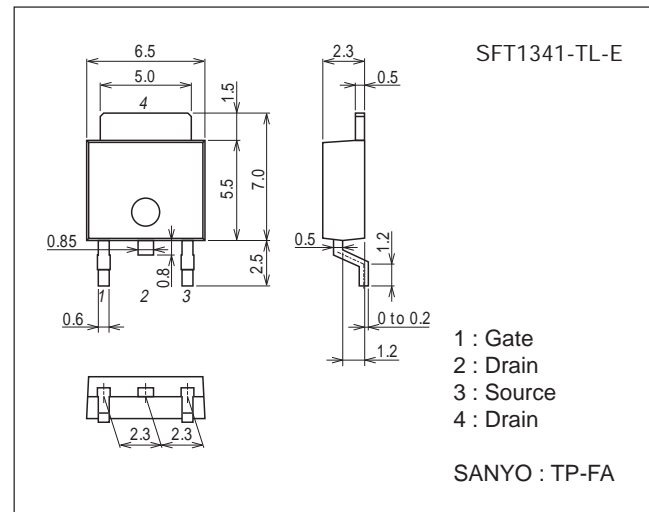
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	VDSS		-40	V
Gate-to-Source Voltage	VGSS		±10	V
Drain Current (DC)	ID		-10	A
Drain Current (PW≤10μs)	IDP	PW≤10μs, duty cycle≤1%	-40	A
Allowable Power Dissipation	PD		1.0	W
		Tc=25°C	15	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Package Dimensions unit : mm (typ)
7518-004



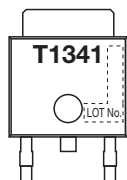
Package Dimensions unit : mm (typ)
7003-004



Product & Package Information

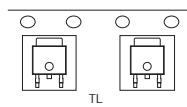
- Package : TP
- JEITA, JEDEC : SC-64, TO-251
- Minimum Packing Quantity : 500 pcs./bag

Marking (TP, TP-FA)

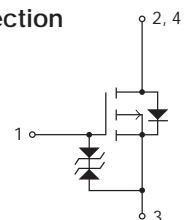


- Package : TP-FA
- JEITA, JEDEC : SC-63, TO-252
- Minimum Packing Quantity : 700 pcs./reel

Packing Type (TP-FA) : TL



Electrical Connection



SANYO Semiconductor Co., Ltd.

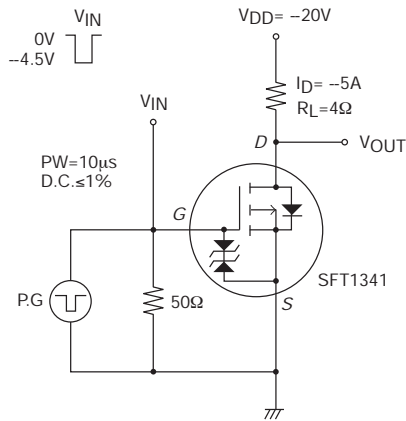
<http://semicon.sanyo.com/en/network>

SFT1341

Electrical Characteristics at $T_a=25^\circ\text{C}$

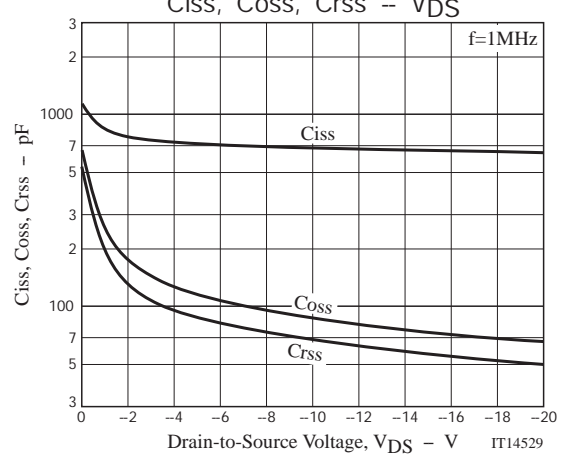
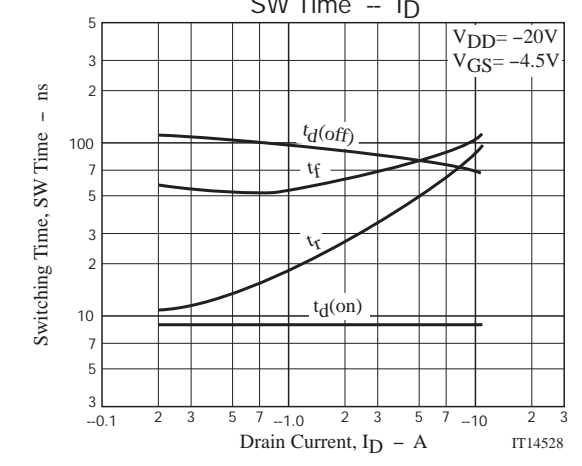
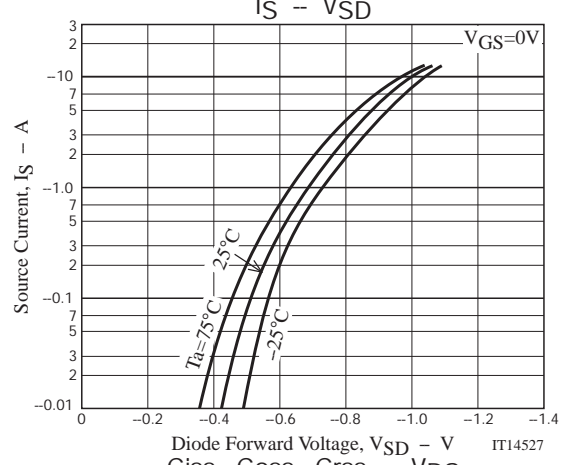
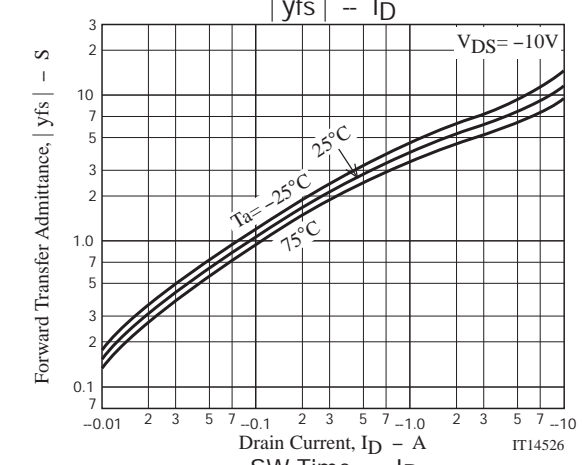
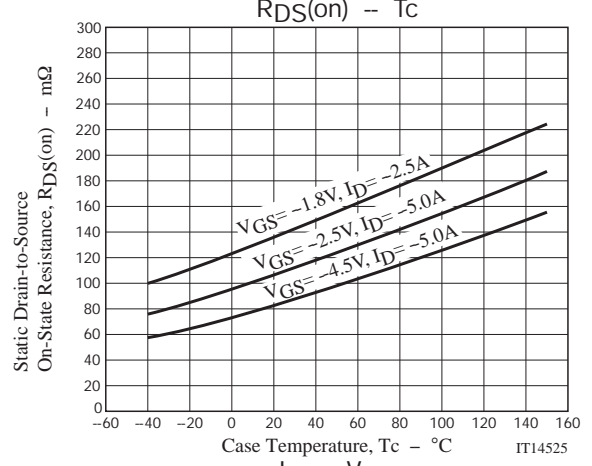
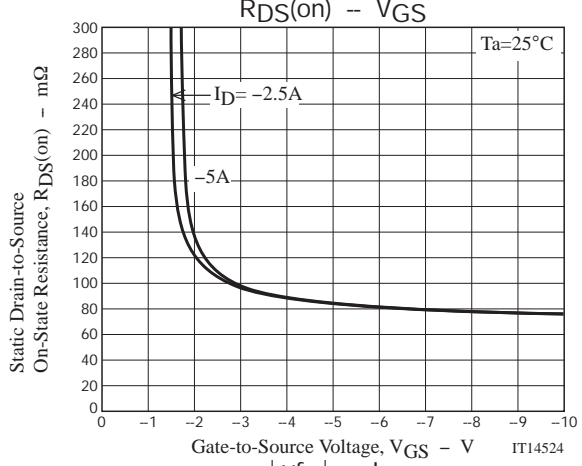
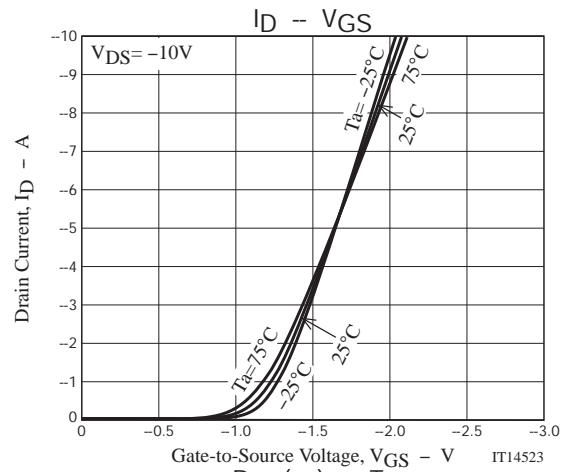
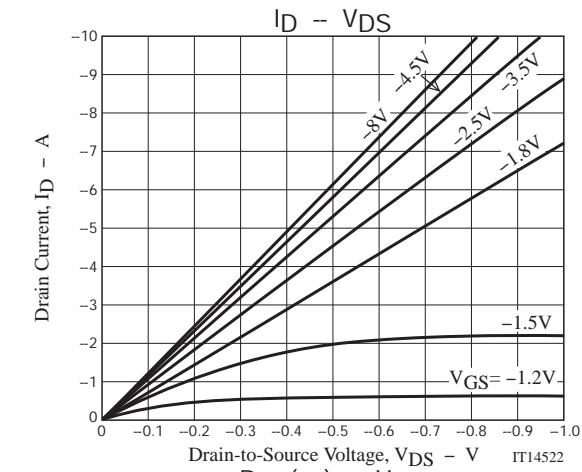
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=-1\text{mA}, V_{GS}=0\text{V}$	-40			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-40\text{V}, V_{GS}=0\text{V}$			-1	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 8\text{V}, V_{DS}=0\text{V}$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=-10\text{V}, I_D=-1\text{mA}$	-0.4		-1.4	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=-10\text{V}, I_D=-5\text{A}$	4.6	7.7		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)1}$	$I_D=-5\text{A}, V_{GS}=-4.5\text{V}$		86	112	$\text{m}\Omega$
	$R_{DS(on)2}$	$I_D=-5\text{A}, V_{GS}=-2.5\text{V}$		110	154	$\text{m}\Omega$
	$R_{DS(on)3}$	$I_D=-2.5\text{A}, V_{GS}=-1.8\text{V}$		140	210	$\text{m}\Omega$
Input Capacitance	C_{iss}	$V_{DS}=-20\text{V}, f=1\text{MHz}$		650		pF
Output Capacitance	C_{oss}			65		pF
Reverse Transfer Capacitance	C_{rss}			50		pF
Turn-ON Delay Time	$t_{d(on)}$		See specified Test Circuit.		9.0	
Rise Time	t_r			50		ns
Turn-OFF Delay Time	$t_{d(off)}$			81		ns
Fall Time	t_f			80		ns
Total Gate Charge	Q_g	$V_{DS}=-20\text{V}, V_{GS}=-4.5\text{V}, I_D=-10\text{A}$			8.0	
Gate-to-Source Charge	Q_{gs}			1.4		nC
Gate-to-Drain "Miller" Charge	Q_{gd}			2.5		nC
Diode Forward Voltage	V_{SD}	$I_S=-10\text{A}, V_{GS}=0\text{V}$		-1.0	-1.5	V

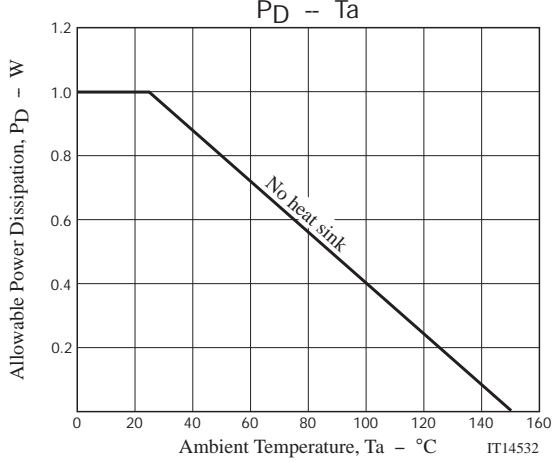
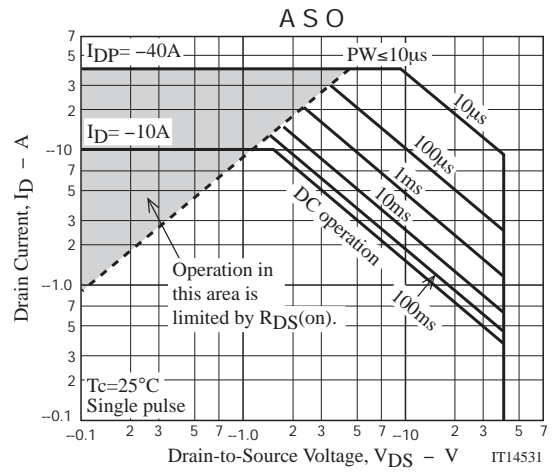
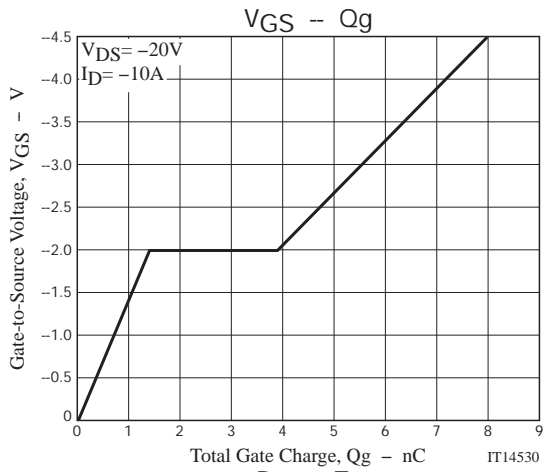
Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
SFT1341-E	TP	500pcs./bag	Pb Free
SFT1341-TL-E	TP-FA	700pcs./reel	





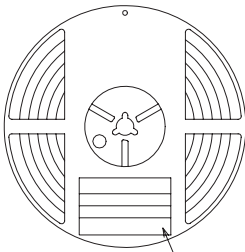
Taping Specification

SFT1341-TL-E

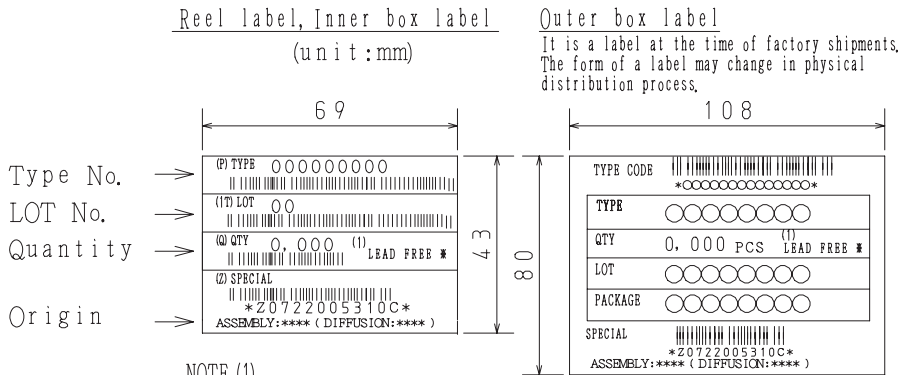
Packing Format

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



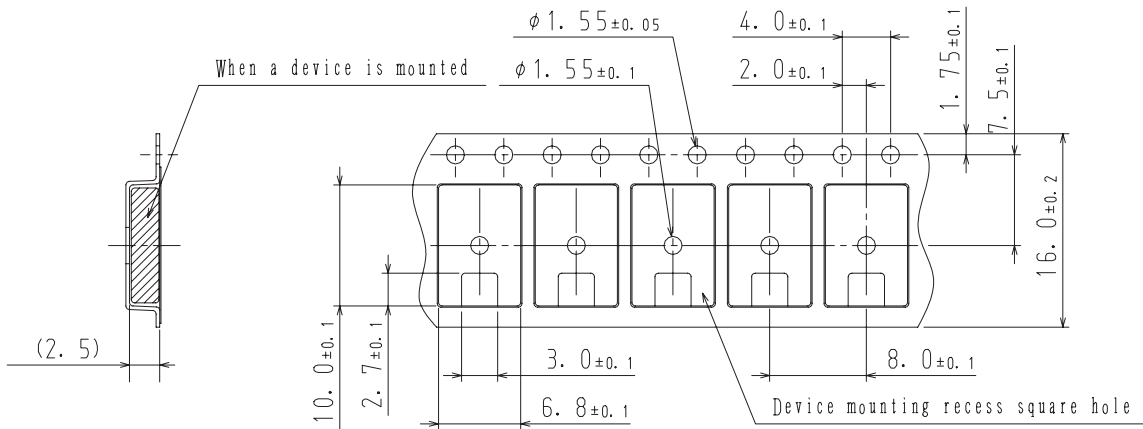
NOTE (1)

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

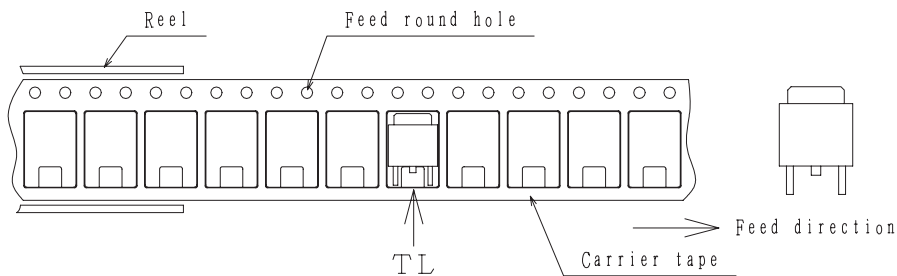
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

Taping configuration

1. Carrier tape size (unit:mm)



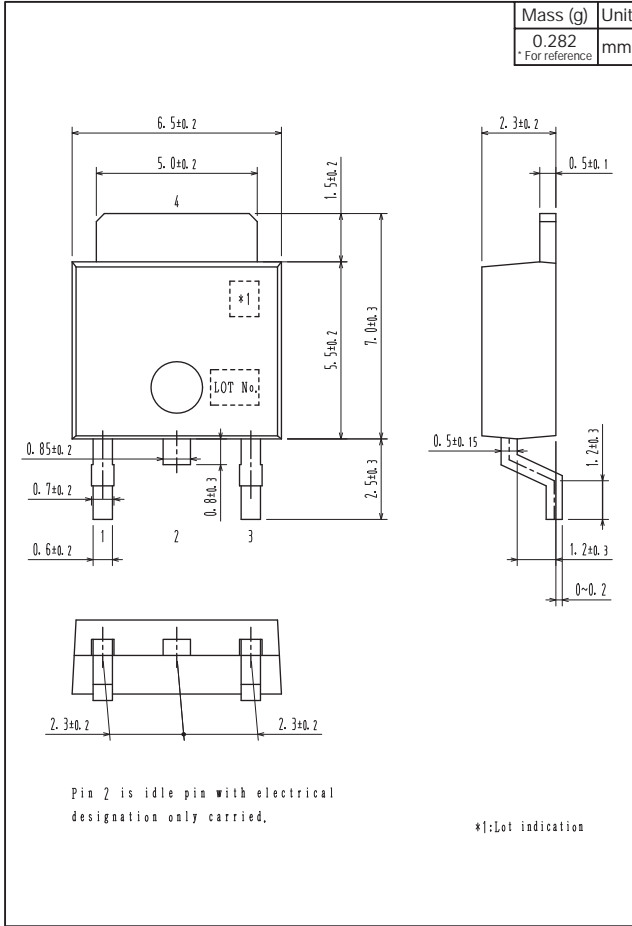
2. Device placement direction



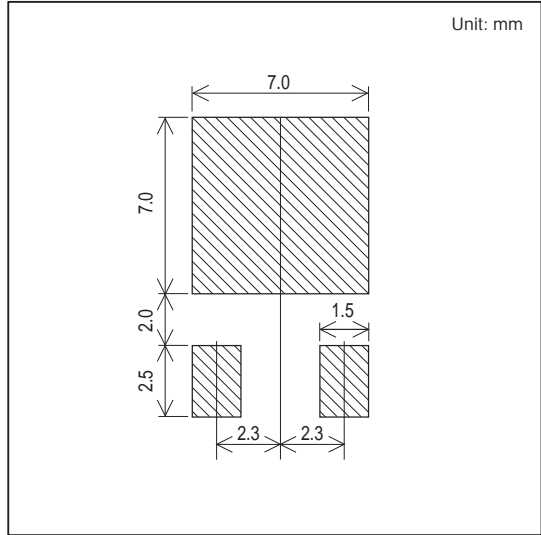
Those with one electrode terminal on the feed hole side.....TL

SFT1341

Outline Drawing SFT1341-TL-E



Land Pattern Example



SFT1341

Bag Packing Specification

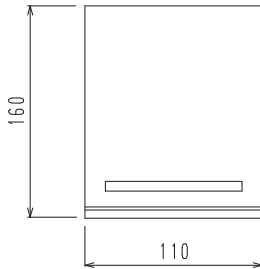
SFT1341-E

1. Packing Format

Package Name	Maximum Number of devices contained (pcs)			
	Bag	Inner box	Outer box	
TP	500	B-1	A-1	A-2
		10,000	50,000	30,000
Packing format (Dimensions:mm (external))				
		Inner box	Outer box	
		B-1	A-1	A-2
		445×225×55	470×250×300	470×250×190

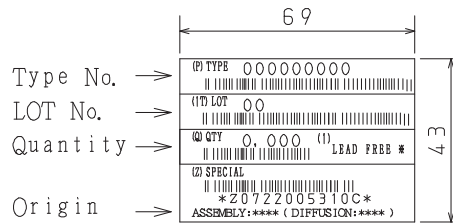
2. Bag dimensions

(unit:mm)



3. Bag label, Inner box label

(unit:mm)



4. Outer box label

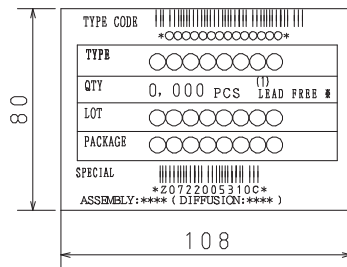
(unit:mm)

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.

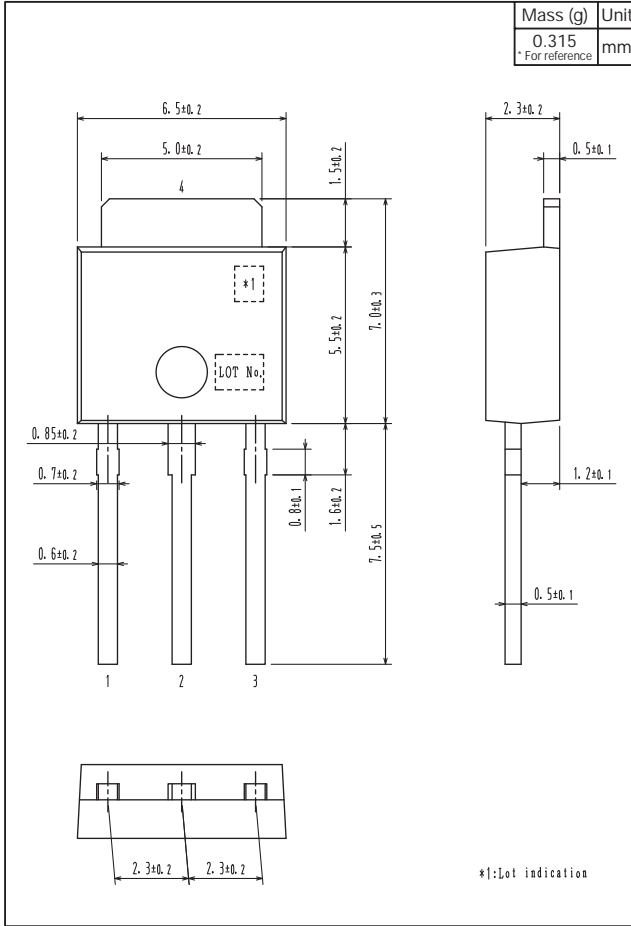
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3



SFT1341

Outline Drawing

SFT1341-E



Note on usage : Since the SFT1341 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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