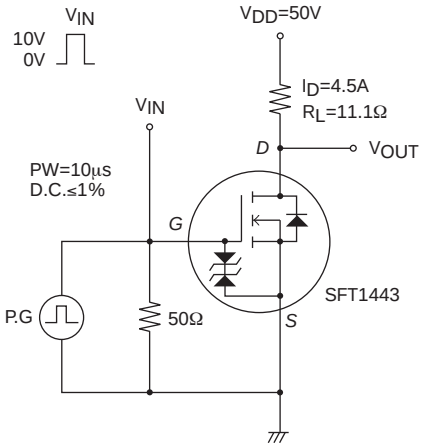
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	100			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=100V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Cutoff Voltage	$V_{GS}(off)$	V_{DS}=10V, I_D=1mA	1.5		2.6	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, I_D=4.5A		4		S
Static Drain-to-Source On-State Resistance	$R_{DS}(on)1$	I_D=3A, V_{GS}=10V		180	225	mΩ
	$R_{DS}(on)2$	I_D=1.5A, V_{GS}=4.5V		195	275	mΩ
	$R_{DS}(on)3$	I_D=1.5A, V_{GS}=4V		205	290	mΩ
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		490		pF
Output Capacitance	Coss			34		pF
Reverse Transfer Capacitance	Crss			19		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit.		8		ns
Rise Time	t_r			10		ns
Turn-OFF Delay Time	$t_d(off)$			34		ns
Fall Time	t_f			24		ns
Total Gate Charge	Qg	V_{DS}=50V, V_{GS}=10V, I_D=9A		9.8		nC
Gate-to-Source Charge	Qgs			1.8		nC
Gate-to-Drain “Miller” Charge	Qgd			1.6		nC
Diode Forward Voltage	V_{SD}	I_S=9A, V_{GS}=0V		1.03	1.2	V

Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
SFT1443-H	TP	500pcs./bag	Pb Free and Halogen Free
SFT1443-TL-H	TP-FA	700pcs./reel	

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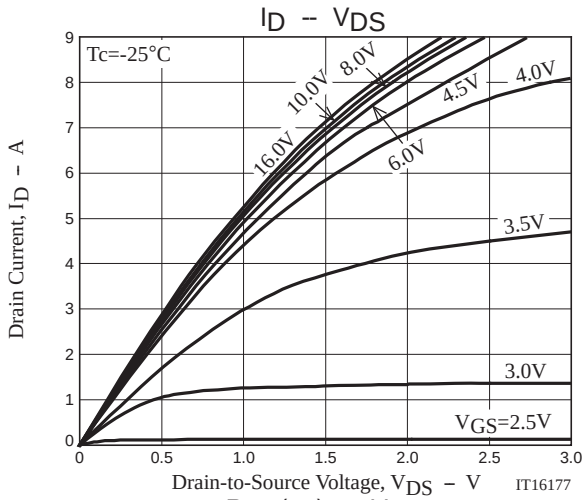

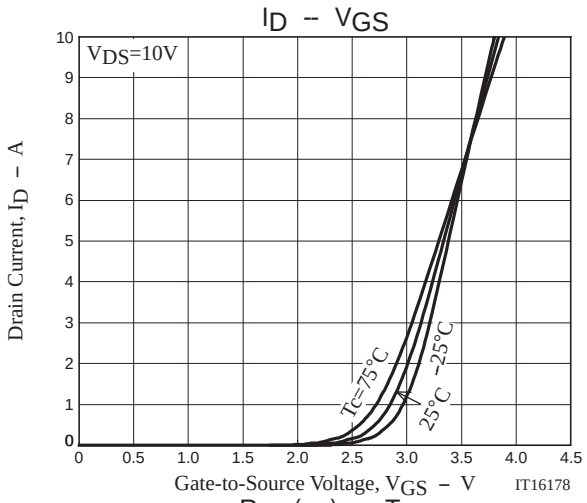

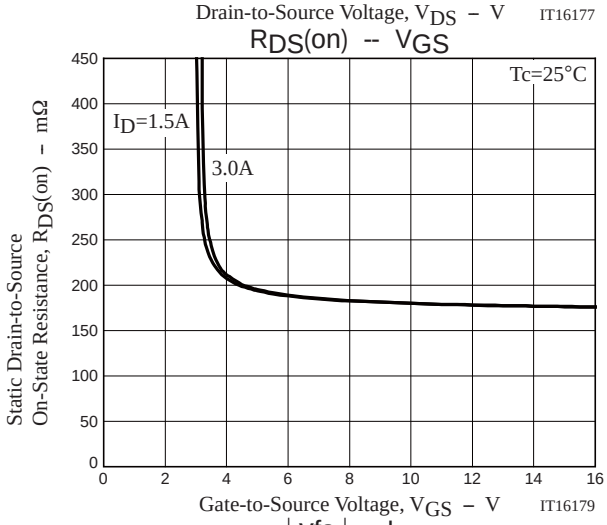

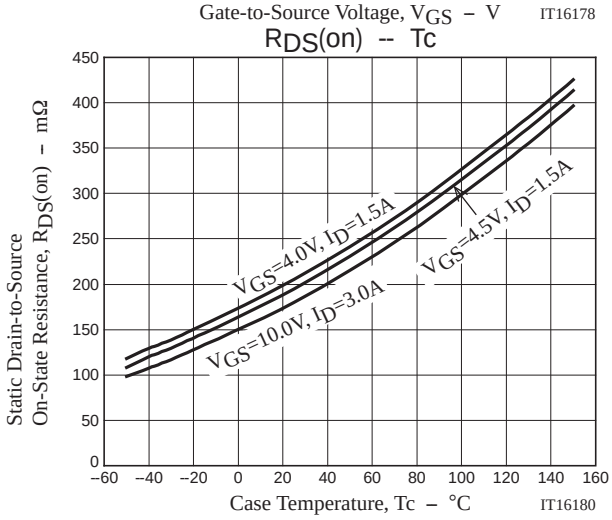

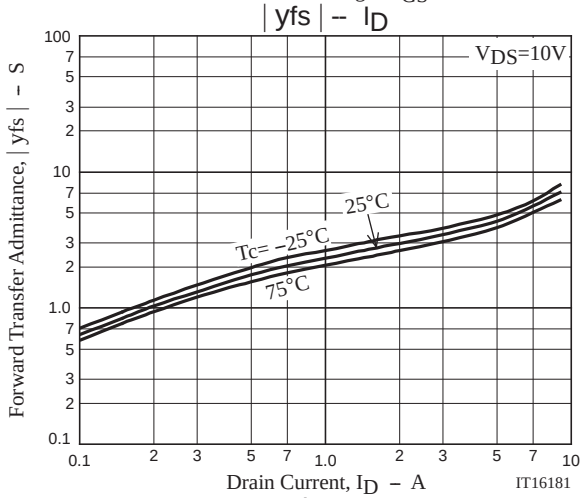

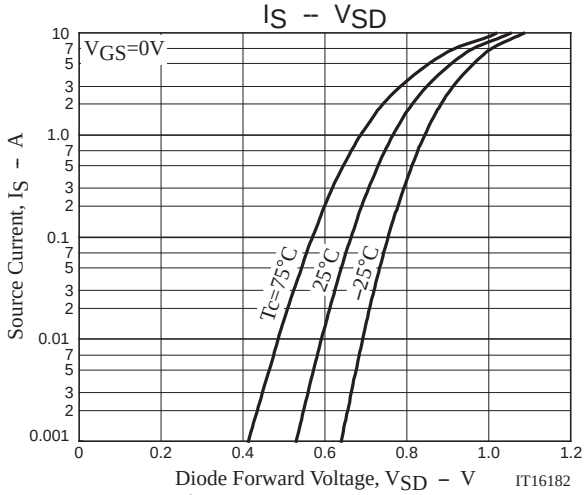

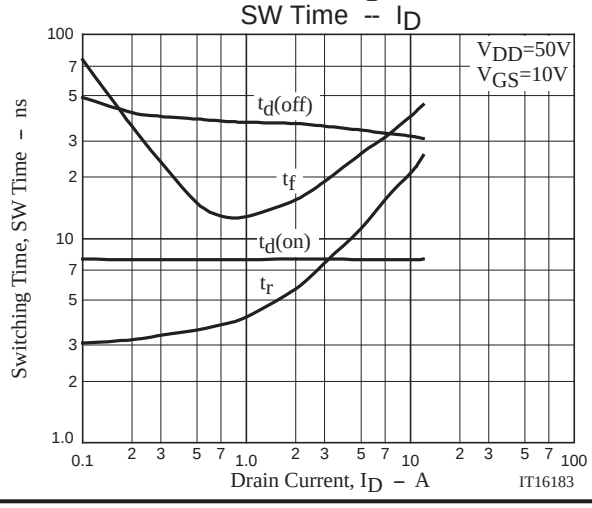

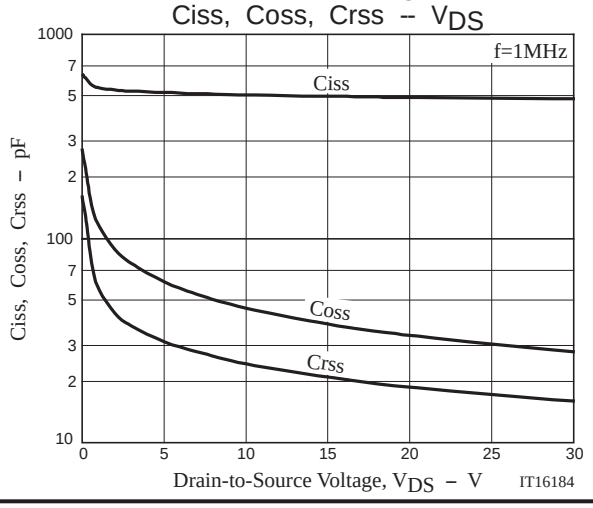

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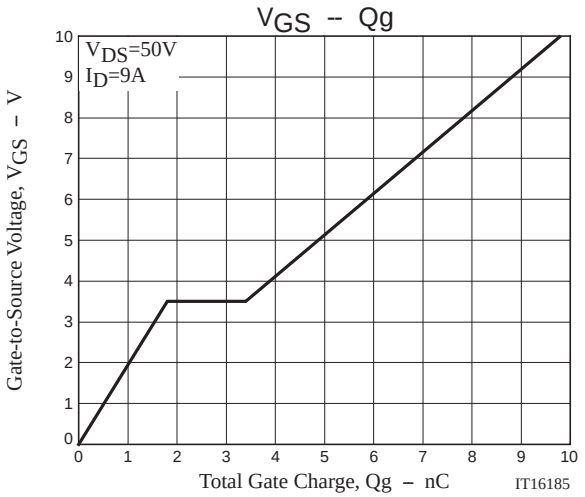

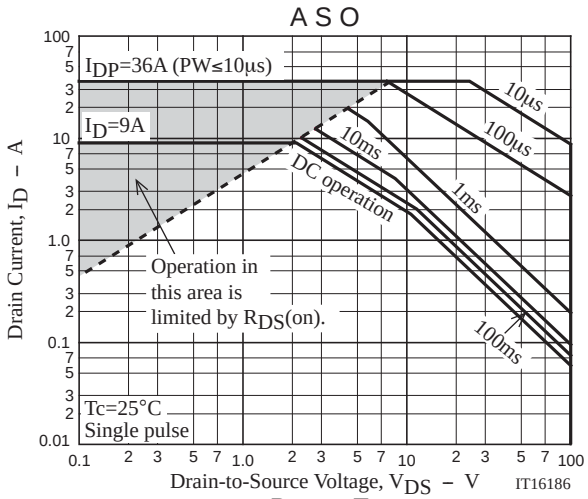

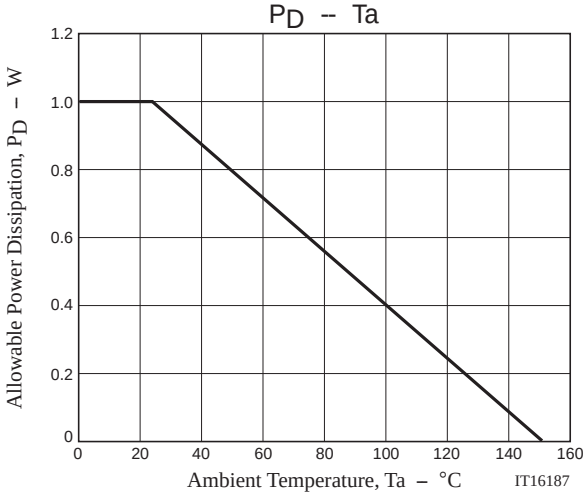

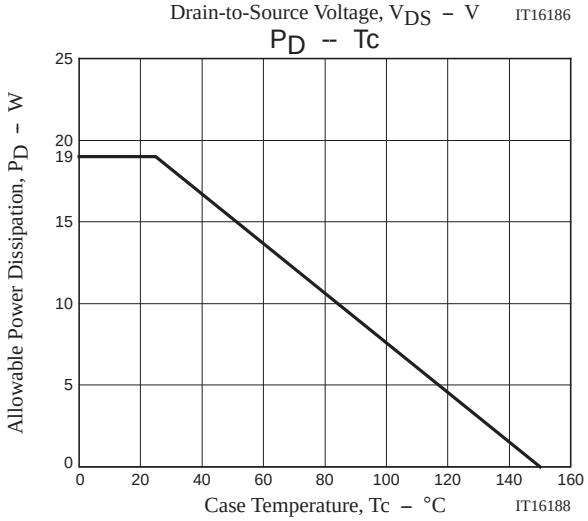

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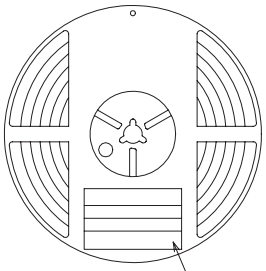
Taping Specification

SFT1443-TL-H

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

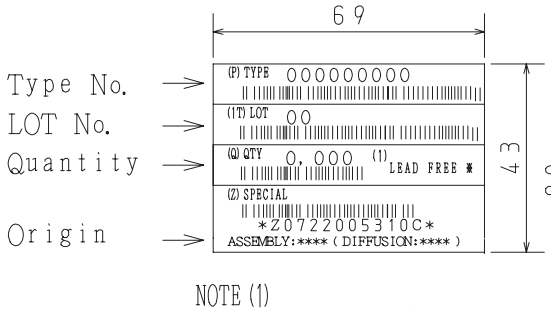
Packing method



Reel label

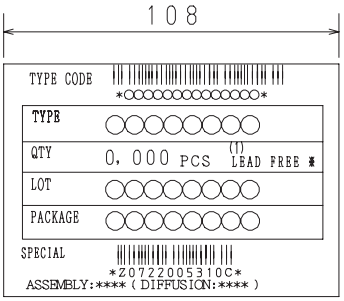
Reel label, Inner box label

(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.

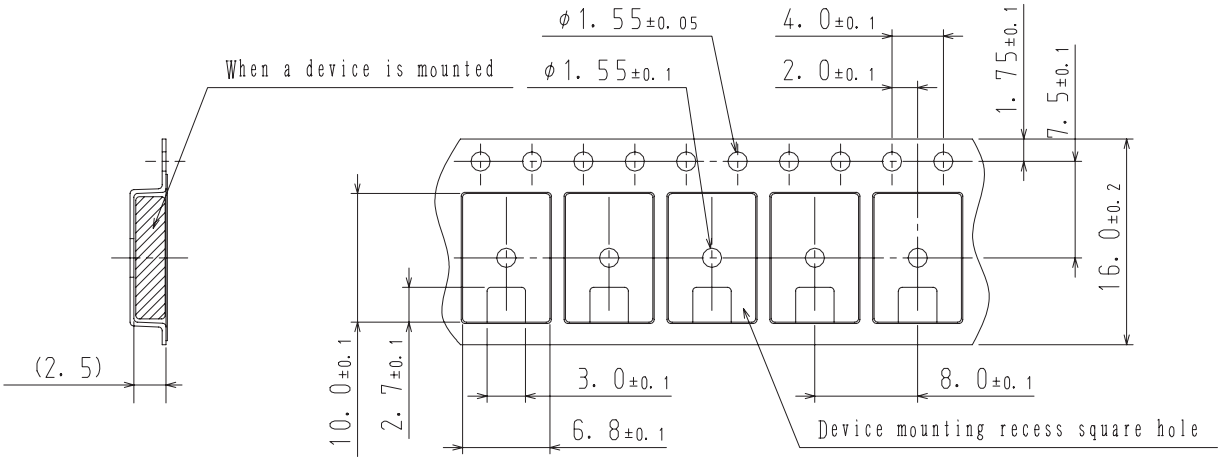


NOTE (1)
The LEAD FREE ※ description shows that the surface treatment of the terminal is lead free.

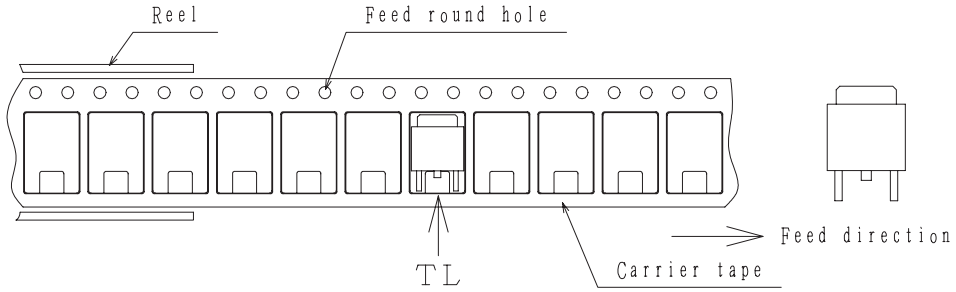
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

Taping configuration

1. Carrier tape size (unit:mm)



2. Device placement direction



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

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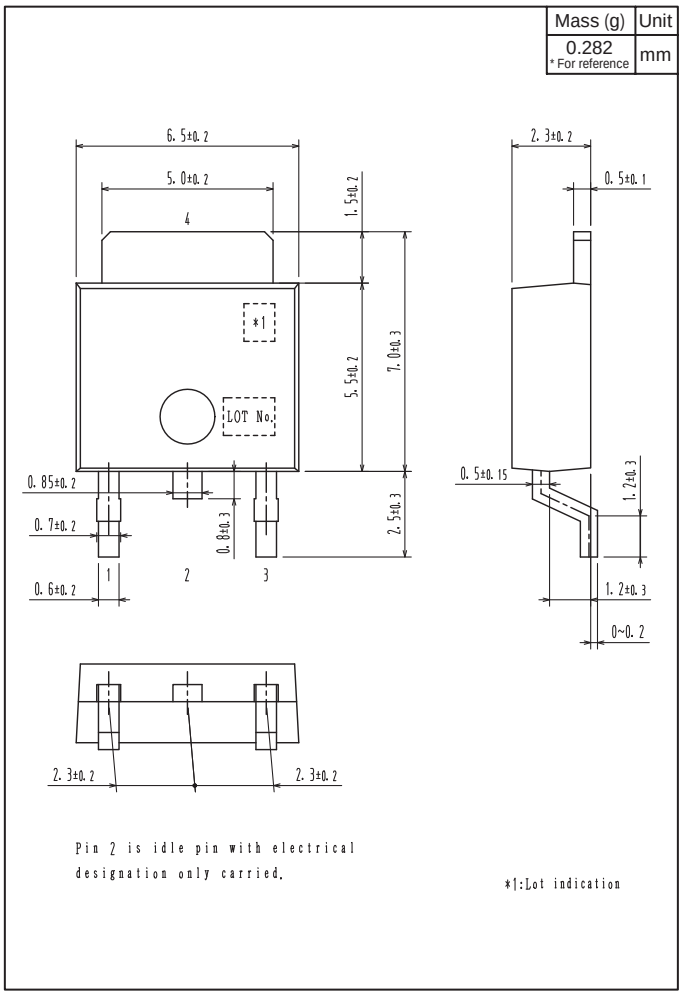
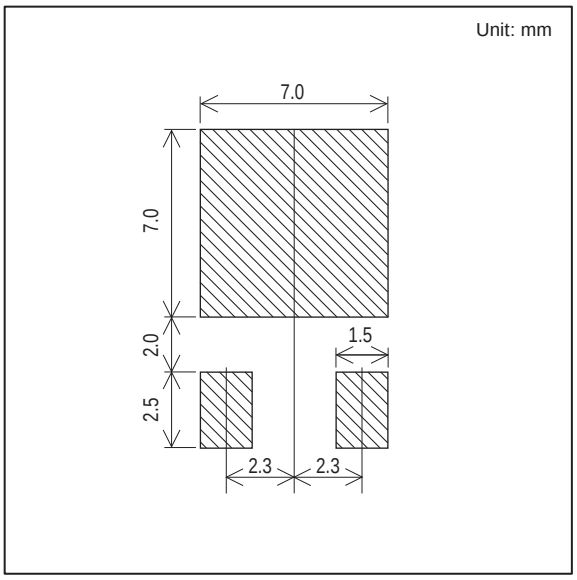
Outline Drawing

SFT1443-TL-H



Land Pattern Example



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Bag Packing Specification

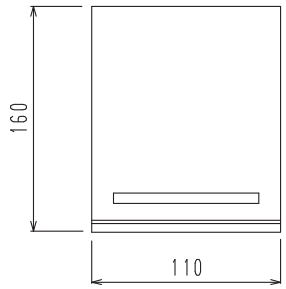
SFT1443-H

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

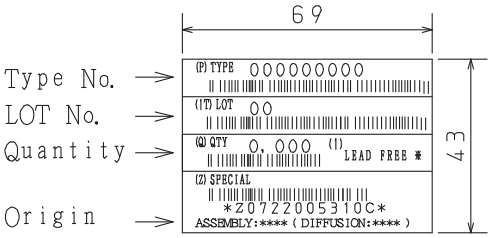
2. Bag dimensions

(unit: mm)



3. Bag label, Inner box label

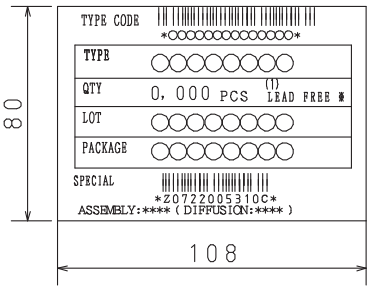
(unit: mm)



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

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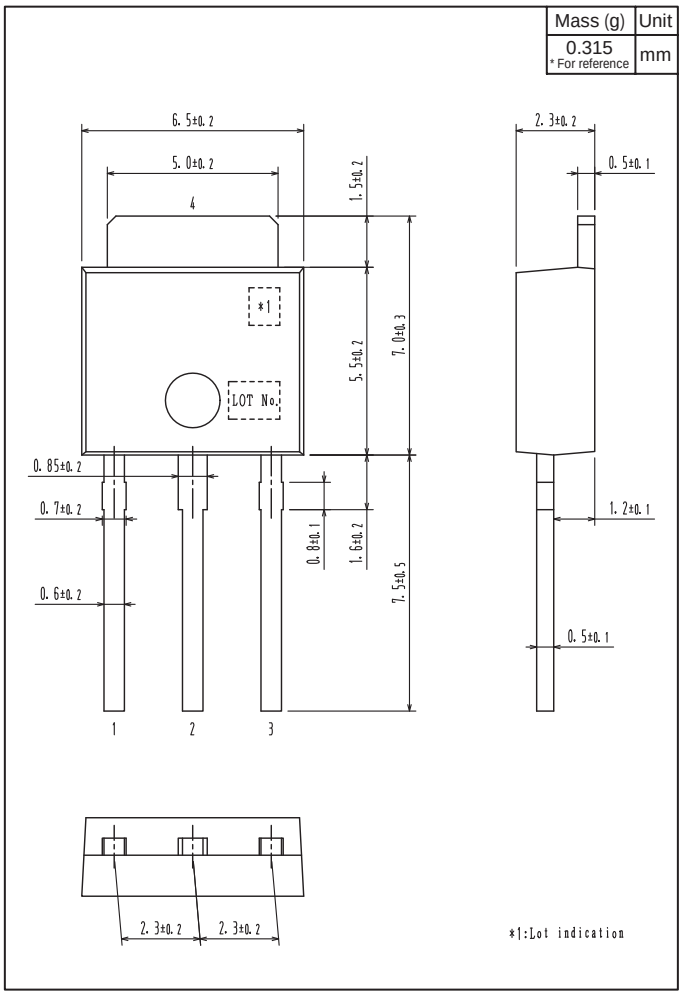
Outline Drawing

SFT1443-H



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Note on usage : Since the SFT1443 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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