

### PACKAGES AND TAPING REELS INFORMATION

#### POWER MANAGEMENT ICs LINE UP

Type of Product	Series	Part No.	Package	Reference
Voltage Detector	RN5VD SERIES	RN5VDxxxx	SOT-23-5 (SC-74A)	5.
	R3111x SERIES	R3111Exxxx	TO-92 (SC-43A)	1.
		R3111Hxxxx	SOT-89 (SC-62)	2.
		R3111Nxx1x	SOT-23-5 (SC-74A)	5.
		R3111Nxx2x	SOT-23-3 (SC-59A)	4.
		R3111Qxxxx	SC-82AB	8.
	R3112x SERIES	R3112Qxx1x	SC-82AB	8.
		R3112Nxx1x	SOT-23-5 (SC-74A)	5.
	R3115Z SERIES	R3115Zxx1x	WLCSP-4-P2	16.
	R3130N SERIES	R3130Nxxxx	SOT-23-3 (SC-59A)	4.
	R3131N SERIES	R3131Nxxxx	SOT-23-3 (SC-59A)	4.
	R3132Q SERIES	R3132QxxEx	SC-82AB	8.
R3133Q SERIES	R3133QxxEx	SC-82AB	8.	
Voltage Regulator	Rx5RL SERIES	RE5RLxxxx	TO-92 (SC-43A)	1.
		RH5RLxxxx	SOT-89 (SC-62)	2.
		RN5RLxxxx	SOT-23-5 (SC-74A)	5.
	RQ5RW SERIES	RQ5RWxxxx	SC-82AB	8.
	Rx5RE SERIES	RE5RExxxx	TO-92 (SC-43A)	1.
		RH5RExxxx	SOT-89 (SC-62)	2.
	RN5RG SERIES	RN5RGxxxx	SOT-23-5 (SC-74A)	5.
	RN5RF SERIES	RN5RFxxxx	SOT-23-5 (SC-74A)	5.
	RN5RT SERIES	RN5RTxxxx	SOT-23-5 (SC-74A)	5.
	Rx5RZ SERIES	RN5RZxxxx	SOT-23-5 (SC-74A)	5.
		RH5RZxxxx	SOT-89 (SC-62)	2.
	R1111N SERIES	R1111Nxx1x	SOT-23-5 (SC-74A)	5.
	R1112N SERIES	R1112Nxx1x	SOT-23-5 (SC-74A)	5.
	R1113Z SERIES	R1113Zxx1x	WLCSP-4-P1	17.
	R1114x SERIES	R1114Qxx1x	SC-82AB	8.
		R1114Nxx1x	SOT-23-5 (SC-74A)	5.
	R1121N SERIES	R1121Nxx1x	SOT-23-5 (SC-74A)	5.
	R1122N SERIES	R1122Nxx1x	SOT-23-5 (SC-74A)	5.
	R1124N SERIES	R1124Nxx1x	SOT-23-5 (SC-74A)	5.
	R1130x SERIES	R1130Hxxxx	SOT-89-5	3.
		R1130Dxxxx	HSO6-6	10.
	R1140Q SERIES	R1140Qxx1x	SC-82AB	8.
	R1141Q SERIES	R1141Qxx1x	SC-82AB	8.
	R1150H SERIES	R1150Hxxxx	SOT-89-5	3.
	R1151N SERIES	R1151Nxxxx	SOT-23-6 (SC-74)	6.
	R1154H SERIES	R1154Hxxxx	SOT-89-5	3.
	R1160x SERIES	R1160Nxx1x	SOT-23-5 (SC-74A)	5.
		R1160Dxx1x	SON-6	9.
	R1170x SERIES	R1170Hxxxx	SOT-89-5	3.
		R1170Dxxxx	HSO6-6	10.
	R5320x SERIES	R5320Gxxxx	SSOP-8G (0.65mm pitch)	13.
		R5320Dxxxx	SON-8	11.
	R5321D SERIES	R5321Dxxxx	SON-8	11.
	R5322N SERIES	R5322Nxxxx	SOT-23-6W	7.
	R5323N SERIES	R5323Nxxxx	SOT-23-6 (SC-74)	6.
	R5323Z SERIES	R5323Zxxxx	WLCSP-6-P1	18.
	R5324D SERIES	R5324Dxxxx	SON-8	11.
	R5510H SERIES	R5510Hxxxx	SOT-89-5	3.

## PACKAGES AND TAPING REELS INFORMATION

Type of Product	Series	Part No.	Package	Reference
DC/DC Converter	RN5RK SERIES	RN5RKxxxx	SOT-23-5 (SC-74A)	5.
	RN5RY SERIES	RN5RYxx1x	SOT-23-5 (SC-74A)	5.
	RN5RY202	RN5RY202x	SOT-23-5 (SC-74A)	5.
	RS5RM SERIES	RS5RMxxxxx	8 pin SOP (1.27mm pitch)	14.
	RS5RJ SERIES	RS5RJxxxxx	8 pin SOP (1.27mm pitch)	14.
	R1210N SERIES	R1210Nxxxx	SOT-23-5 (SC-74A)	5.
	R1211x SERIES	R1211N002x	SOT-23-6W	7.
		R1211D002x	SON-6	9.
	R1221N SERIES	R1221Nxxxx	SOT-23-6W	7.
	R1223N SERIES	R1223Nxxxx	SOT-23-5 (SC-74A)	5.
	R1224N SERIES	R1224Nxx2x	SOT-23-5 (SC-74A)	5.
	R1225N SERIES	R1225Nxx2x	SOT-23-6W	7.
	R1230D SERIES	R1230Dxxxx	SON-8	11.
	R1250V SERIES	R1250Vxx1A	TSOP-8	15.
	R1280D SERIES	R1280D002x	SON-10	12.
	R5210x SERIES	R5210Nxxxx	SOT-23-6W	7.
R5210Dxxxx		HSO-6	10.	
BATTERY MANAGEMENT ICs	R5421N SERIES	R5421Nxxxx	SOT-23-6 (SC-74)	6.
	R5426x SERIES	R5426Dxxxx	SON-6	9.
		R5426Nxxxx	SOT-23-6 (SC-74)	6.
USB High Side Switch	R5520H SERIES	R5520H001x	SOT-89-5	3.
μP PERIPHERAL ICs	R5101G SERIES	R5101GxxxA	SSOP-8G (0.65mm pitch)	13.

### Ricoh product code information on lead-free plating products

In terms of products in this data book, there are two kinds of plating way to the pins.

In other words, they are lead-free plating and lead plating.

They can be distinguished with the last extension of the product code.

When you order our lead-free plating devices, please designate the last extension as the product code.

[ Product Name Example ] In case of the extension is "-FB"

Lead plating product: R3111N301A-TR etc.

Lead-free plating product: R3111N301A-TR-FB etc.

[ Meaning of the extension ]

-FA: Sn-Ag plating (Lead-free)

-FB: Sn-Bi plating (Lead-free)

-FC: Sn-Cu plating (Lead-free)

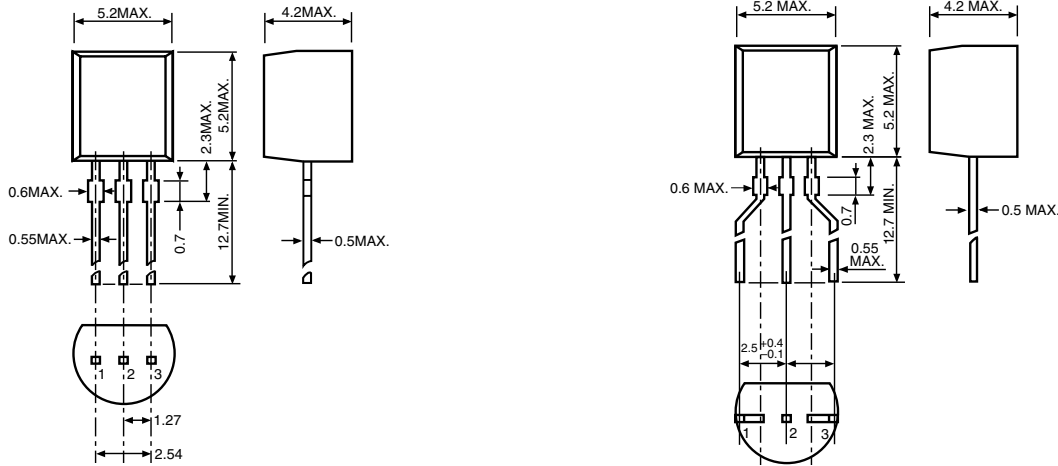
-FD: Sn-Ag-Cu plating (Lead-free)

without last extension: Sn-Pb plating (as usual)

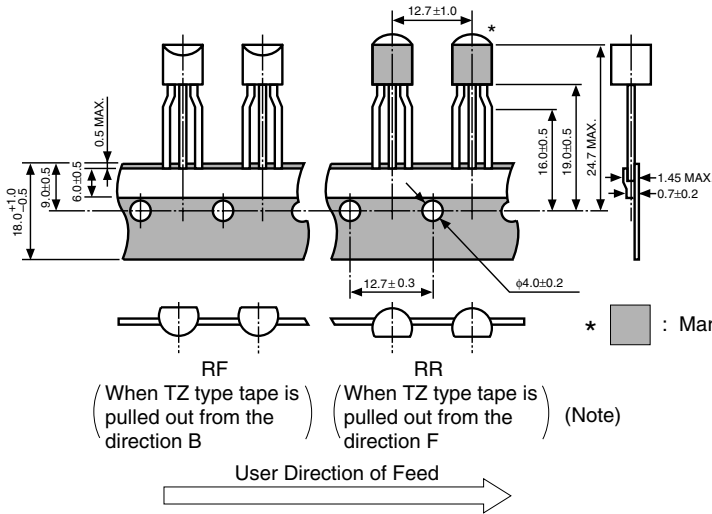
The composition of lead-free depends on the product series and packages.

1. TO-92 (SC-43A)  
PACKAGE DIMENSIONS

Unit: mm



TAPING SPECIFICATION

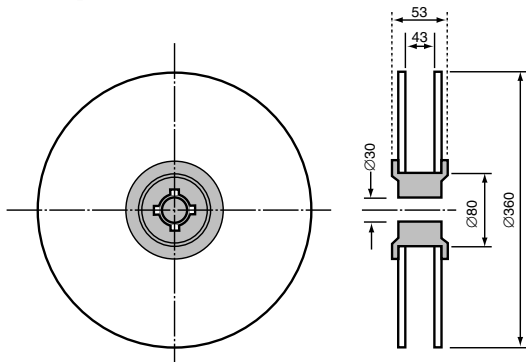


(Note) When taping is performed, the pins of TO-92 are subjected to a particular forming.

(Note) TZ type tape is not in the form of a reel, but is packed in a zigzag state in box. Therefore, the tape can be used as either an RF type tape or an RR type tape, depending upon the pulling out direction (B or F).

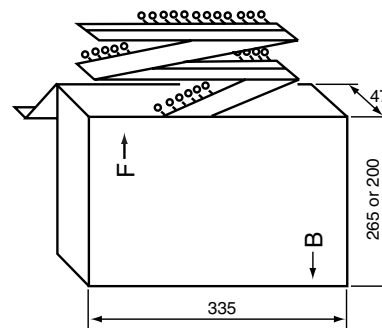
TAPING REEL DIMENSIONS  
(RF, RR)

(1reel=2000pcs)



PACKING BOX DIMENSIONS (TZ)

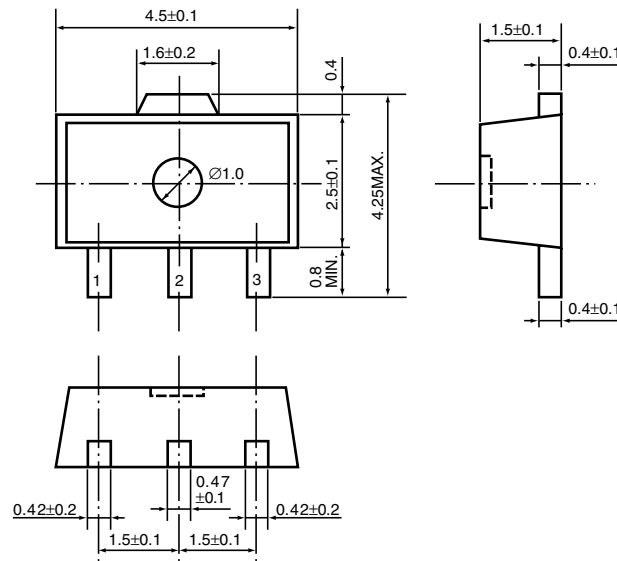
(1box=2500pcs)



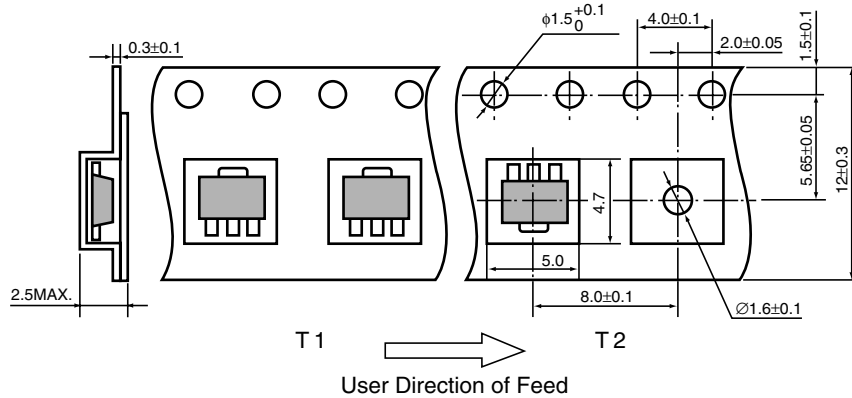
2. SOT-89 (SC-62)

Unit: mm

PACKAGE DIMENSIONS

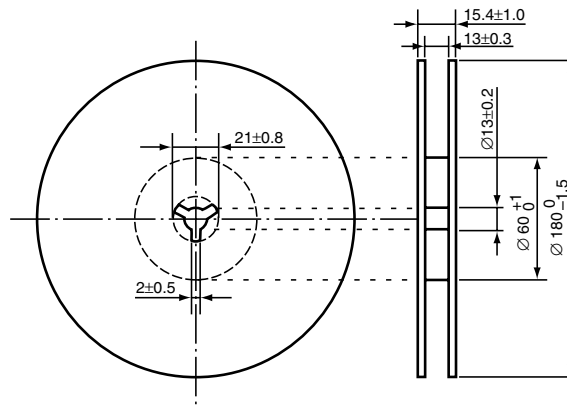


TAPING SPECIFICATION (T1: Standard Type)



TAPING REEL DIMENSIONS

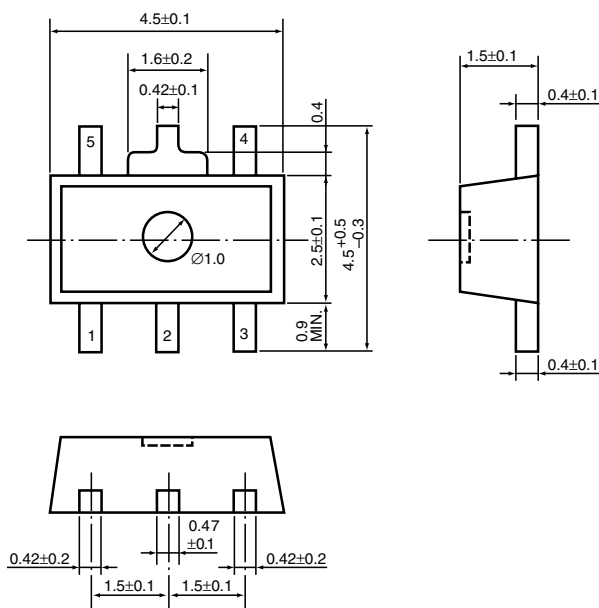
(reel=1000pcs)



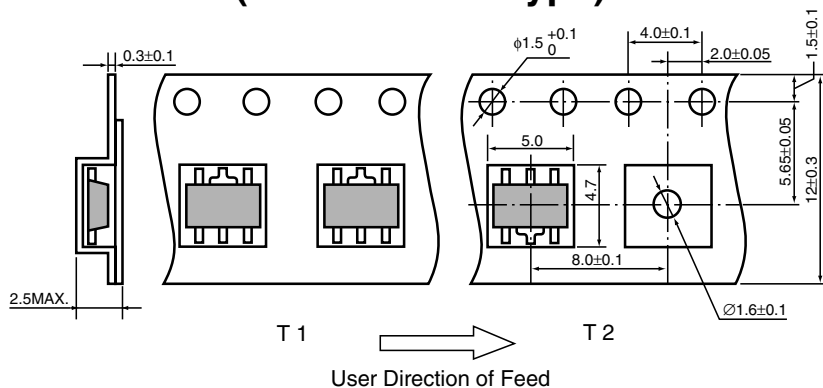
3. SOT-89-5

Unit: mm

PACKAGE DIMENSIONS

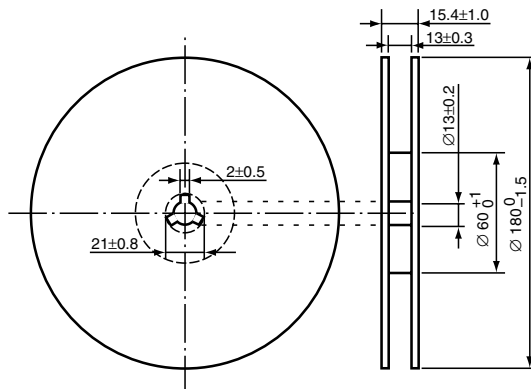


TAPING SPECIFICATION (T1: Standard Type)



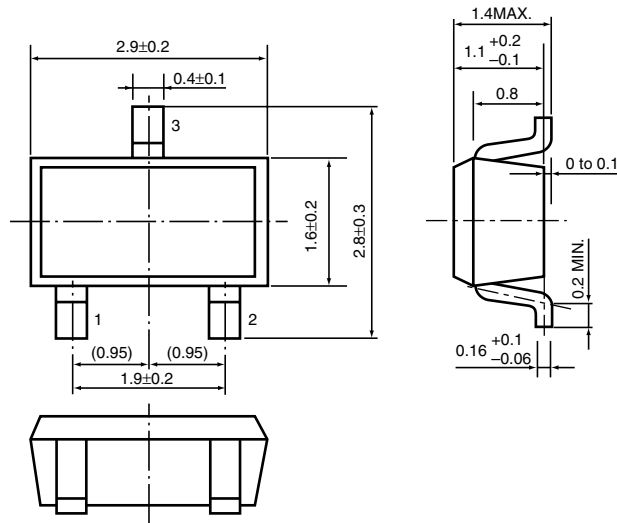
TAPING REEL DIMENSIONS

(1reel=1000pcs)

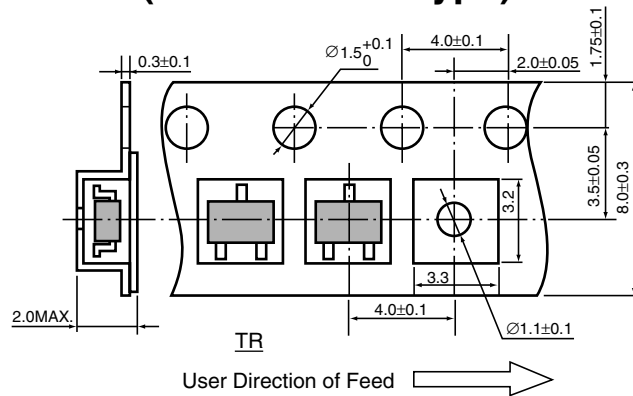


4. SOT-23-3 (SC-59A)  
**PACKAGE DIMENSIONS**

Unit: mm

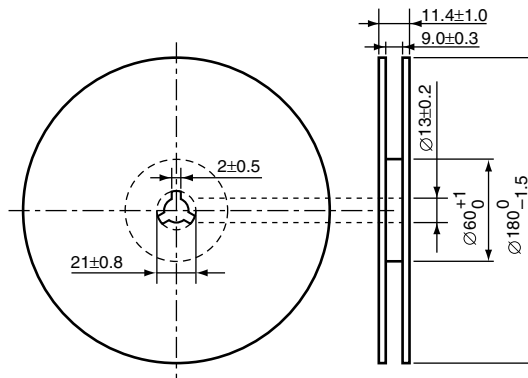


**TAPING SPECIFICATION (T1: Standard Type)**



**TAPING REEL DIMENSIONS**

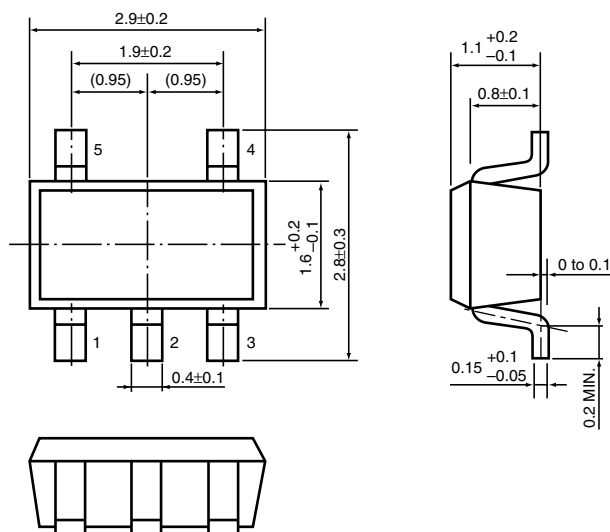
(1reel=3000pcs)



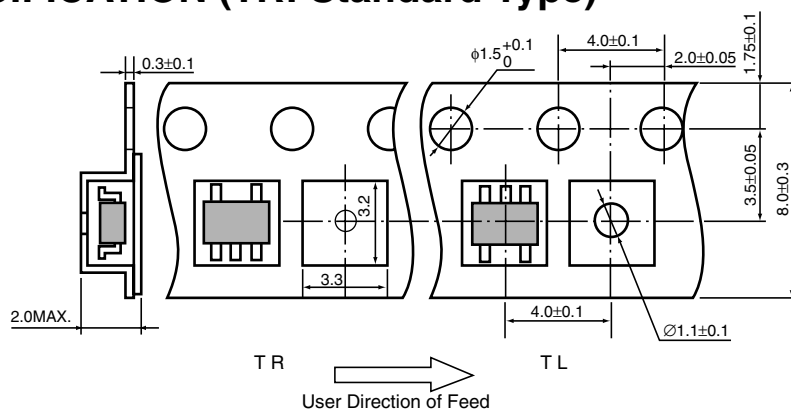
5. SOT-23-5 (SC-74A)

Unit: mm

PACKAGE DIMENSIONS

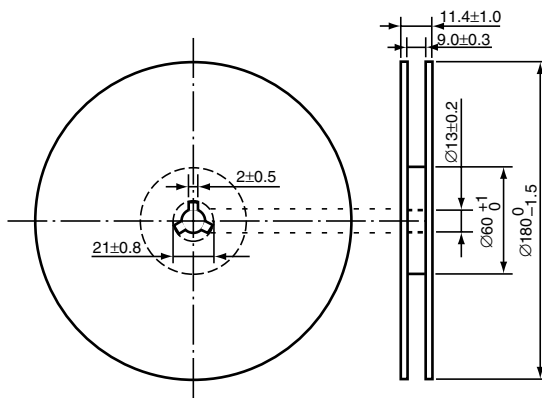


TAPING SPECIFICATION (TR: Standard Type)



TAPING REEL DIMENSIONS

(1reel=3000pcs)

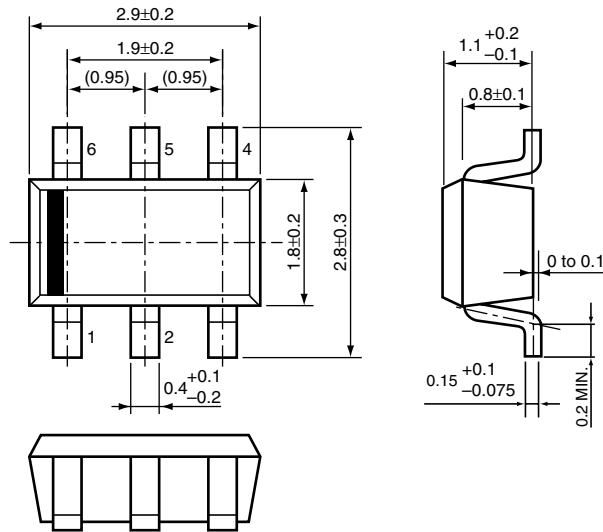




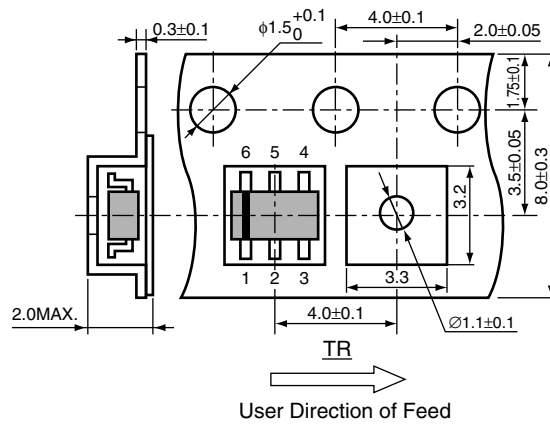
7. SOT-23-6W

Unit: mm

PACKAGE DIMENSIONS

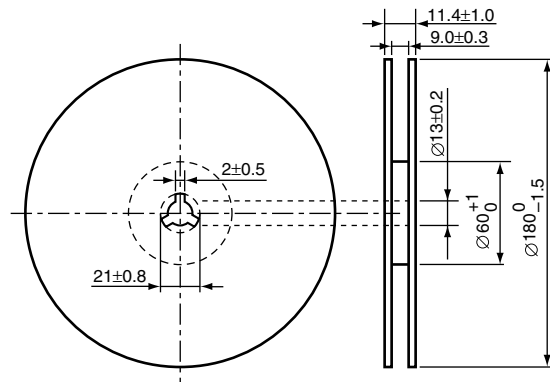


TAPING SPECIFICATION



TAPING REEL DIMENSIONS

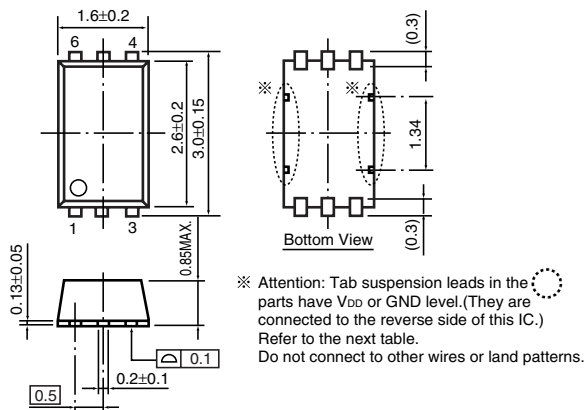
(1reel=3000pcs)





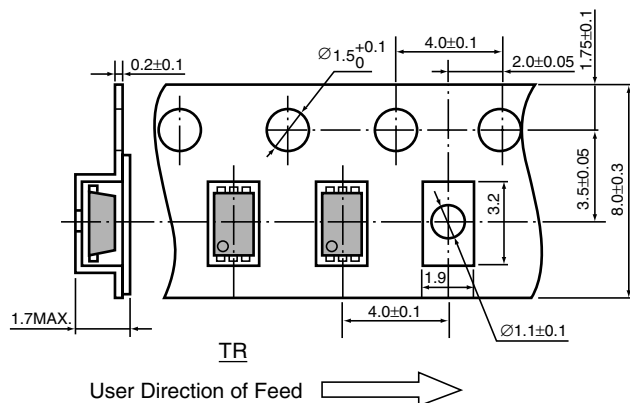
9. SON-6  
PACKAGE DIMENSIONS

Unit: mm



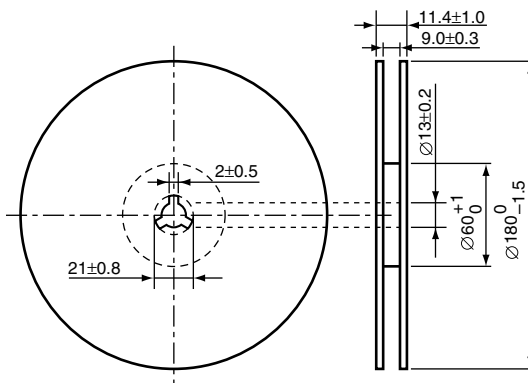
Product name	Tab level
R1160Dxx1x	GND
R1211D002x	GND
R5426Dxxxx	V <sub>DD</sub>

TAPING SPECIFICATION



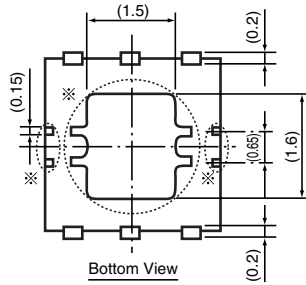
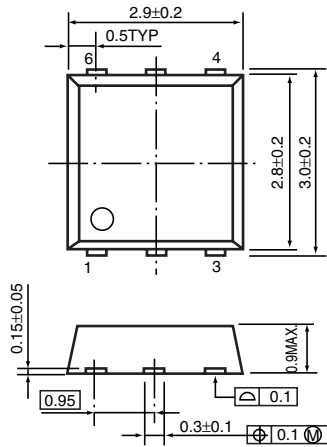
TAPING REEL DIMENSIONS

(1reel=3000pcs)



10. HSON-6  
PACKAGE DIMENSIONS

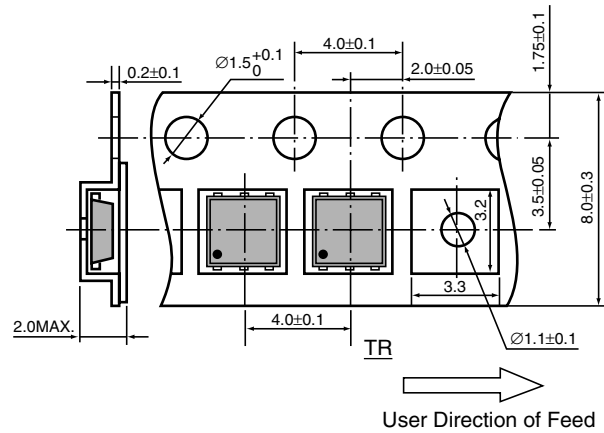
Unit: mm



Product name	Tab level
R1130Dxxxx	V <sub>DD</sub>
R1170Dxxxx	GND
R5210Dxxxx	GND

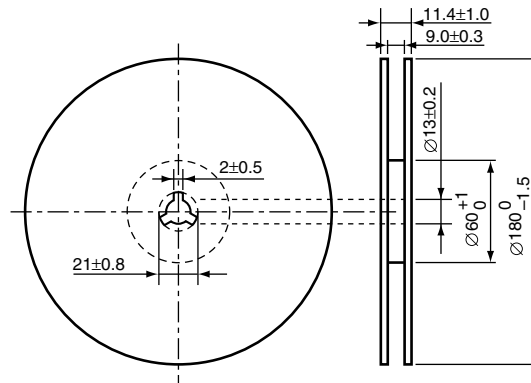
※ Attention: Tabs or Tab suspension leads in the parts have V<sub>DD</sub> or GND level. (They are connected to the reverse side of this IC.) Refer to the next table. Do not connect to other wires or land patterns.

TAPING SPECIFICATION



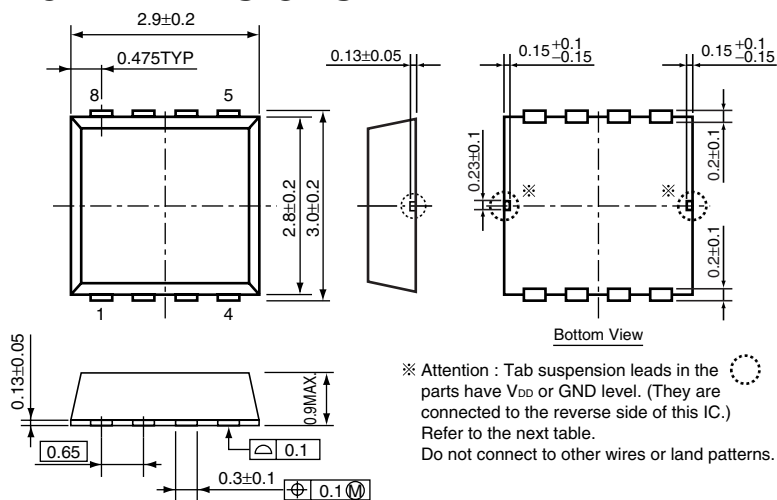
TAPING REEL DIMENSIONS

(1reel=3000pcs)



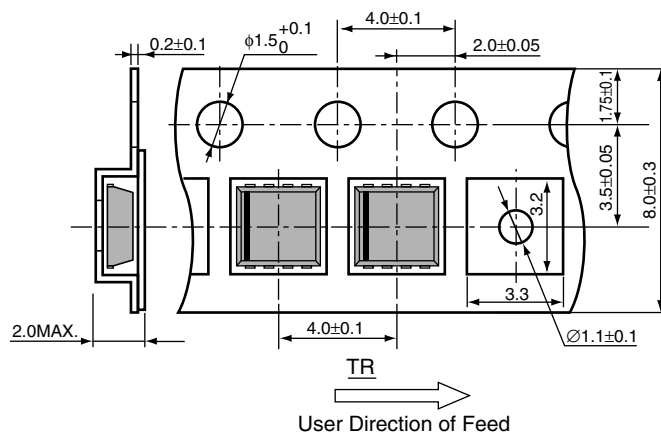
11. SON-8  
PACKAGE DIMENSIONS

Unit: mm



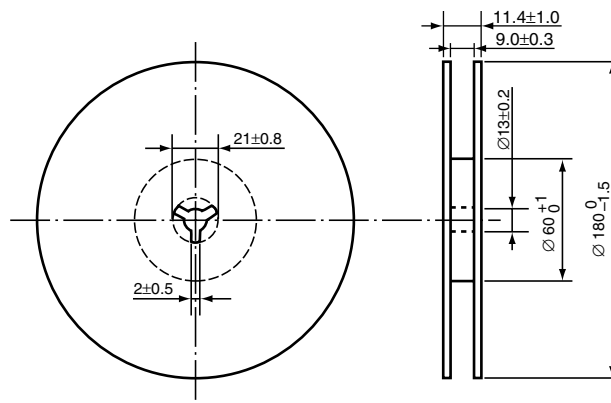
Product name	Tab level
R5320Dxxxx	V <sub>DD</sub>
R5321Dxxxx	V <sub>DD</sub>
R5324Dxxxx	GND
R1230Dxxxx	GND

TAPING SPECIFICATION



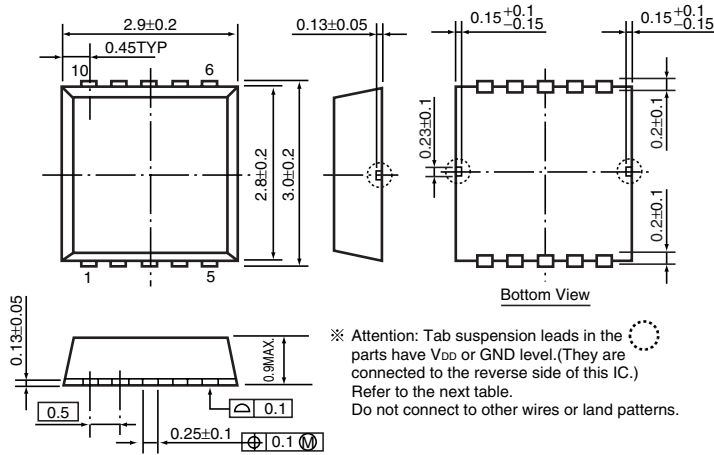
TAPING REEL DIMENSIONS

(1reel=3000pcs)



12. SON-10  
PACKAGE DIMENSIONS

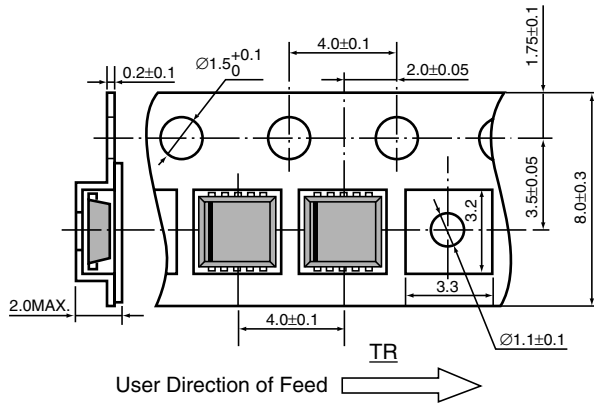
Unit: mm



Product name	Tab level
R1280D002x	GND

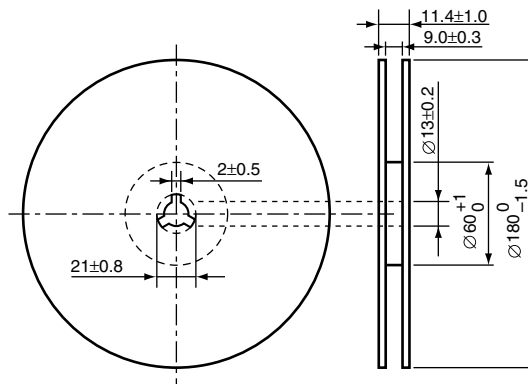
※ Attention: Tab suspension leads in the parts have V<sub>DD</sub> or GND level. (They are connected to the reverse side of this IC.) Refer to the next table. Do not connect to other wires or land patterns.

TAPING SPECIFICATION



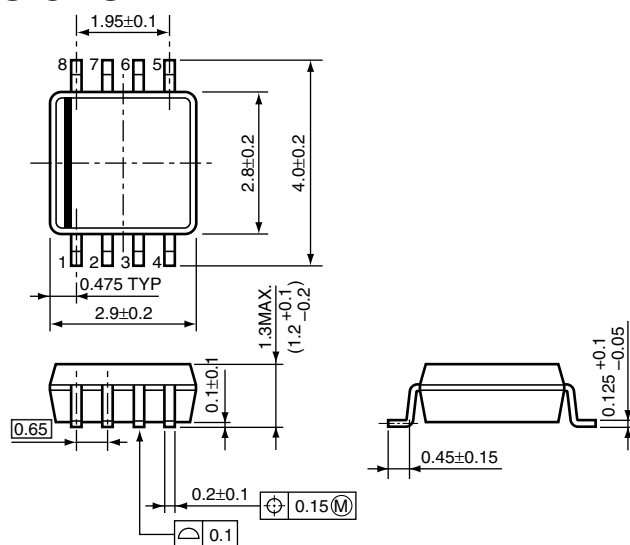
TAPING REEL DIMENSIONS

(1reel=3000pcs)

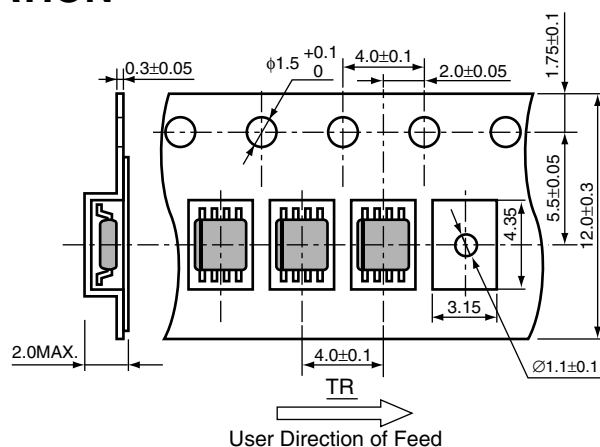


13. SSOP-8G (0.65mm pitch)  
**PACKAGE DIMENSIONS**

Unit: mm

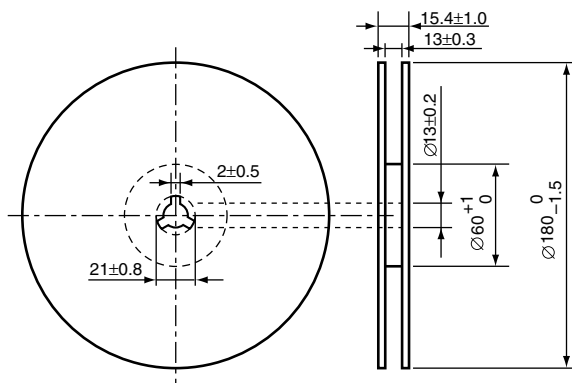


**TAPING SPECIFICATION**



**TAPING REEL DIMENSIONS**

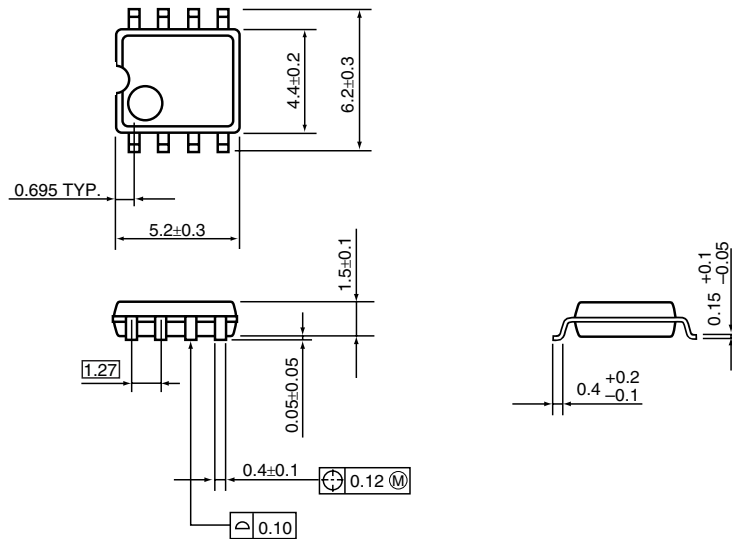
(1reel=3000pcs)



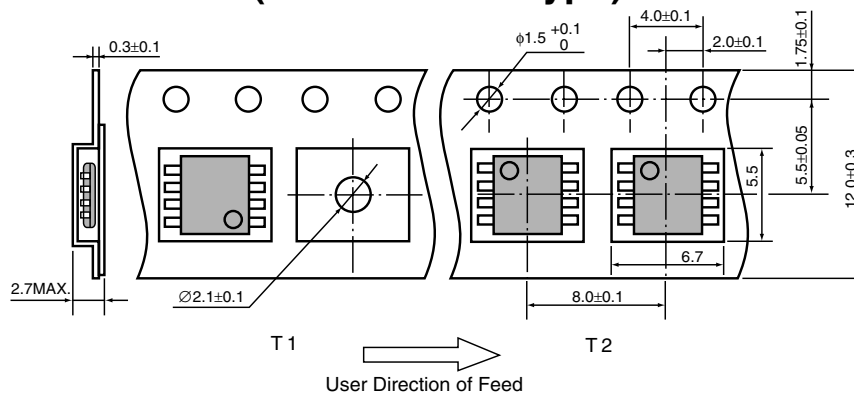
14. 8pin SOP (1.27mm pitch)

Unit: mm

PACKAGE DIMENSIONS

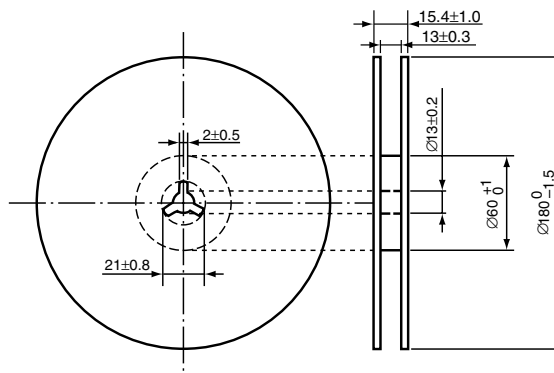


TAPING SPECIFICATION (T2: Standard Type)



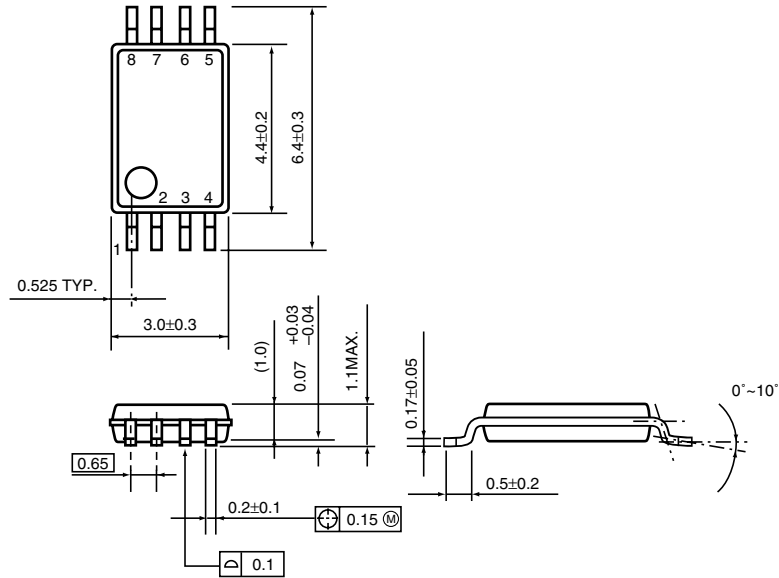
TAPING REEL DIMENSIONS

(1reel=1000pcs)

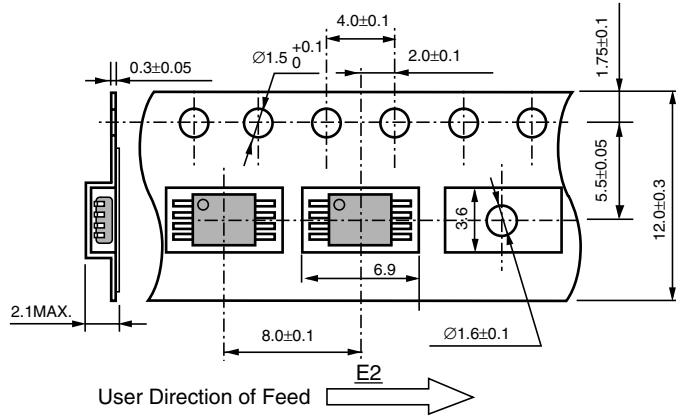


15. 8 PIN TSOP  
PACKAGE DIMENSIONS

Unit: mm



TAPING SPECIFICATION



TAPING REEL DIMENSIONS

(1reel=2000pcs)

