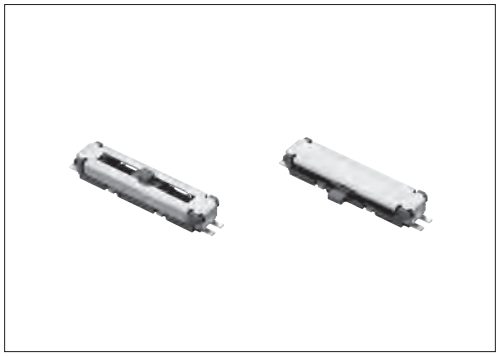
RS08U Compact Reflow Type

High precision space saving design helps smaller and lighter set



Typical Specifications

Items	Specifications
Total resistance tolerance	±30%
Maximum operating voltage	5V DC
Operating force	0.17±0.15N
Operating life	10,000 cycles
Operating temperature range	−10℃ to +70℃

Product Line

Number of resistor elements	Direction of lever	Travel (mm)	Length of lever (mm)	Total resistance (k Ω)	Resistance taper	Minimum order unit (pcs.)		Product No.	Drawing No.
						Japan	Export		
Single-unit	Vertical	8	0.6	10	1B	9,000	9,000	**RS08U111Z001**	1
	Horizontal		1.3					**RS08U11AZ001**	2

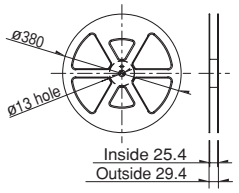
Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
1,500	9,000	9,000	24	405×405×228

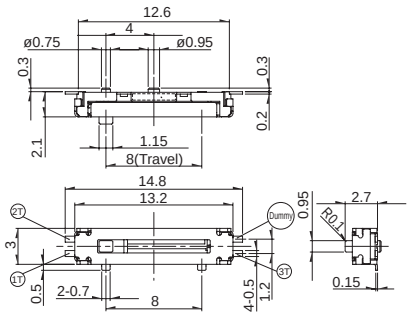
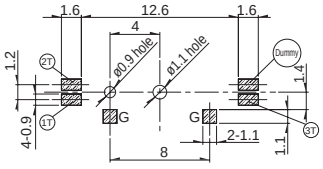
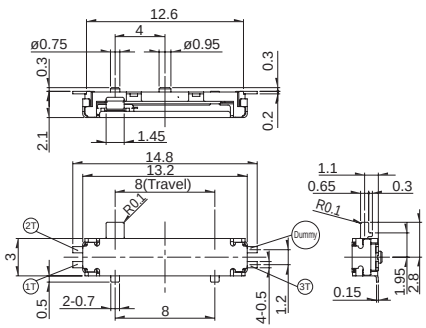
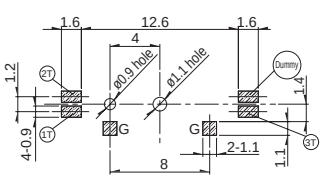
Unit:mm

Reel size



Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole (Viewed from mounting side)
1	Vertical 		 Shaded area: Solder land
2	Horizontal 		 Shaded area: Solder land

Refer to P.383 for soldering conditions.

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List of Varieties

Type		Standard Type			Master Type
Series		Super Slide™	Slim Slide™ (Slim 4)	Compact Reflow Type	K Fader
		RS □□ 1	**RS □□ H**	**RS08U**	**RS □□ K**
		Single-unit/Dual-unit	Single-unit/Dual-unit	Single-unit	Single-unit/Dual-unit
Photo					
Travel (mm)		15, 20, 30, 45, 60	15, 20, 30	8	60, 100
Direction of lever		Vertical	Horizontal	Vertical / Horizontal	Vertical
Lever material		Metal / Resin	Resin	Resin	Metal
Operating temperature range		−25℃ to +70℃		−10℃ to +70℃	−10℃ to +60℃
Operating life		15,000 cycles	10,000 cycles		100,000 cycles (Standard) 300,000 cycles (CP)
Available for automotive use		○	—	—	—
Life cycle (availability)		★2	★2	★2	★2
Electrical performance	Total resistance (k Ω)	10, 20, 50, 100, 200	5, 10, 20, 50, 100, 200, 250	10	10, 50, 100 (Standerd) 10 (CP)
	Resistance taper	10A, 15A, 1B, 3B, 4B	15A, 1B, 3B	1B	15A, 1B
	Rated Power	Please see P.355	Please see P.362	0.025W	0.25W
	Insulation resistance	100MΩ min. 250V DC	Dual-unit:100MΩ min. 250V DC	100MΩ min. 100V DC	100MΩ min. 250V DC
	Voltage proof	300V AC for 1 minute	Dual-unit:300V AC for 1 minute	100V AC for 1 minute	250V AC for 1 minute
	Center-taps	Without / With		Without	
Mechanical performance	Operating force	0.3 to 2.5N	$0.6^{+0.5}_{-0.4}$N	0.17±0.15N	Please see P.368
	Center detent	Without / With		Without	
	Stopper strength	50N	30N	5N	100N
	Lever push-pull strength	50N	30N	5N	100N
	Lever wobble (mm) ※ Both sides	$\frac{2(2\times L)}{20}$	1.6 max.	—	$\frac{2(2\times L)}{25}$
	Detent slip-out force	Operating force + (0.2 to 2N)	Operating force+$0.3^{+0.5}_{-0.25}$N	—	—
	Lever deviation (mm) ※ One side	0.5 max.	—	—	0.5 max.
Terminal style		Insertion		Reflow	Lead (Standard) Connector (CP)
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Notes

1. "L" in the "Lever Wobble" column of the above table indicates the length of lever.
2. 「RS □□」
   → □□ indicates travel.
3. ○ Indicates applicability to some products in the series.

Reference for Manual Soldering

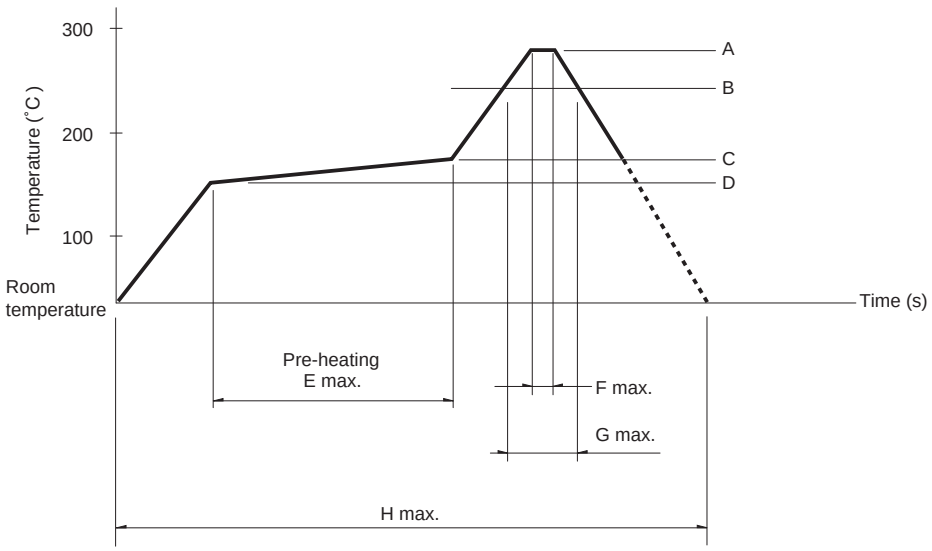
Series	Tip temperature	Duration of Soldering time	No. of solders
RS□□1, RS□□H, RS08U, RS□□K (Standard), RS□□N,RS6011□P, RS□□N1□M, RSA0K1□V (Motor terminal)	350℃ max.	3s max.	1 time

Reference for Dip Soldering

Series	Preheating		Dip soldering		Number of soldering
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
RS□□1, RS□□H, RS□□N, RS6011□P, RS□□N1□M	100℃ max.	1 min. max.	260℃	5s max.	1 time

Example of Reflow Soldering Condition

Temperature profile



Series	A	B	C	D	E	F	G	H	No. of reflows
RS08U	250℃	200℃	150℃	150℃	2 min.	3s	40s	4 min.	1 time

Notes

1. When using an infrared reflow oven, solder may sometimes not be applied. Be sure to use a hot air reflow oven or a type that uses infrared rays in combination with hot air.
2. The temperatures given above are the maximum temperatures at the terminals of the products when employing a hot air reflow method. The temperature of the PC board and the surface temperature of the products may vary greatly depending on the PC board material, its size and thickness. Ensure that the surface temperature of the products does not rise to 250°C or greater.
3. Conditions vary to some extent depending on the type of reflow bath used. Be sure to give due consideration to this prior to use.