

[1. Product name and part number]

Product Name	Part Number
Terminal	A1258-T
Housing	A1258H
Wafer Assembly ST.(SMT)	A1258Series
Wafer Assembly R.A(SMT)	A1258Series

[2. Ratings and applicable wires]

ITEM	STANDARD
Rated Voltage	50V DC/AC (rms)
Rated Current	1A (AWG. #26)
Applicable wires	AWG. #26 ~ #30
Insulation O.D	Ø0.8~Ø1.0mm
Ambient Temperature	-25°C ~ +85°C *

* : Including terminal temperature rise.

[3. Performance]

3-1. Electrical Performance

ITEM		Test condition	Requirement
3-1-1	Contact resistance	Mate connectors, measure by dry circuit, 20mV(max.), 10mA. Mated Length : 50mm (AWG. #26) (Based upon JIS C5402 5.4)	30mΩ (max.)
3-1-2	Insulation resistance	Mate connectors, apply 100VDC between adjacent terminals. (Based upon JIS C5402 5.2/MIL-STD-202 method 302 Cond.B)	100MΩ (min.)
3-1-3	Dielectric strength	Mate connectors, apply 500VAC for 1 minute between adjacent terminals. (Based upon JIS C5402 5.1/MIL-STD-202 Method 301)	No breakdown and flashover
3-1-4	Contact resistance on crimped portion	Crimp the maximum applicable wire on to the terminal, measure by dry circuit, 20mV(max.), 10mA. Wire Length : 50mm (AWG. #26)	30mΩ (max.)

3-2. Mechanical Performance

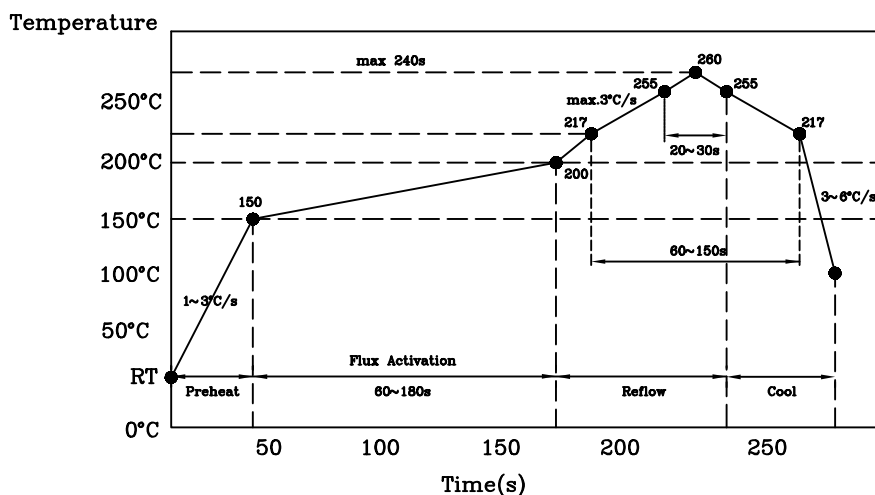
ITEM		Test condition	Requirement
3-2-1	Insertion force and withdrawal force	Mate and unmate the connectors at a speed of 25±3mm/minute	Refer to paragraph 5

3-2-2	Crimping pull out force	Fix the crimped terminal, apply axial pull out force on the wire at a speed of 25±3mm/min. (Based upon JIS C5402 6.22)	AWG.#26	1.9kgf min.
			AWG.#28	1.0kgf min.
			AWG.#30	0.8kgf min.
3-2-3	Terminal insertion force	Insert the crimped terminal into the housing at a speed of 25±3mm/min.	0.5kgf (max.)	
3-2-4	Terminal/ Housing retention force	Apply axial pull out force at a speed of 25±3mm/min. on the terminal assembled In the housing.	0.5kgf (min.)	
3-2-5	Pin retention force	Apply axial push force at a speed of 25±3mm/minute on the contact pin assembled in the base wafer.	0.3kgf (min.)	

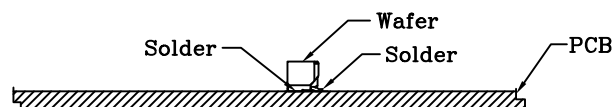
3-3. Environmental Performance and Others

ITEM		Test condition	Requirement	
3-3-1	Repeated insertion/ withdrawal	Mate connector up to 30 cycles repeatedly at a rate of 10 cycles/ minute. After which test the contact resistance	Contact resistance	50mΩ (max.)
3-3-2	Temperature rise	Apply rated current load on mated connector in series-connection. Measure change of temperature on contact using thermocouples for 4 hours. (Based upon UL 1977)		30°C (max.)
3-3-3	Vibration	Amplitude: 0.75mm Sweep time: 10-55-10Hz/minute Duration: 2 Hours in each X、Y、Z axlals. (Based upon MIL-STD-202 method 201A)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
			Discontinui-ty	1μ sec (max.)
3-3-4	Shock	50G, 3 strokes in each X、Y、Z. axlals. (Based upon JIS C0041/MIL-STD-202 method 213B Cond.A)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
			Discontinuity	1μ sec (max.)
3-3-5	Heat resistance	Mated connector shall be placed in an oven for 96±4 hours at +85±2°C. (Based upon JIS C5402 7.8)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
3-3-6	Cold resistance	Mated connector shall be placed in a temperature chamber for 96±4 hours at -25±3°C (Based upon JIS C5402 7.9)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)

3-3-7	Humidity	Mated connector shall be placed in a humidity chamber on the following conditions. Temperature: 40±2°C Relative humidity: 90~95% Duration : 96 Hours (Based upon JIS C0022/MIL-STD-202 Method 103B Cond.B)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
			Dielectric strength	Must meet 3-1-3
			Insulation resistance	50MΩ (min.)
3-3-8	Temperature cycling	Mated connector shall be set to temperature cycling for 5 cycles of which 1 cycle consists of: 1>.+25°C ~ 3 minutes 2>.-25°C ~ 30 minutes 3>.+25°C ~ 3 minutes 4>.+85°C ~ 30 minutes (Based upon JIS C5402 7.2)	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
			Dielectric strength	Must meet 3-1-3
			Insulation resistance	50MΩ (min.)
3-3-9	Salt spray	Mated connector shall be placed in a salt spray chamber on the following conditions. Salt Solution Density : 5±1% Temperature : 35±2°C Duration : First punch,second plate:24±4 Hours First plate,second punch:8±2 Hours Remarks : we make sure the important area	Appearance	No Damage
			Contact Resistance	50mΩ (max.)
3-3-10	Solderability	Immerse fluxed soldered section of contact pin into a solder bath for 3±0.5sec temperature: 230±5°C	95% of immersed area must show no voids nor pin holes.	
3-3-11	Resistance to soldering heat	Mated connector shall be dipped on solder bath for 5±0.5sec temperature: 260±5°C	No Damage in appearance	



Standard JEDEC Temperature Profile (Lead Free Reflow)



[4. Insertion force and withdrawal force]

[UNIT:Kgf]

Circuits	Insertion (max.)	Withdrawal (min.)		
	Initial	Initial	10th	30th
Single	0.25	0.07	0.06	0.05

[5. Product shape, Dimensions and materials]

<REFER TO THE DRAWING>