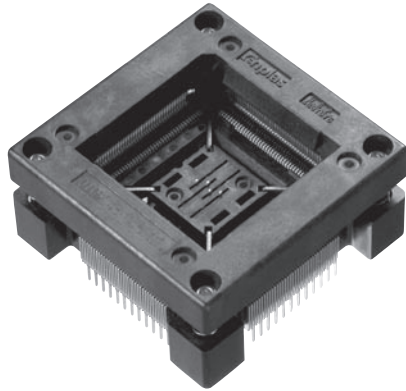


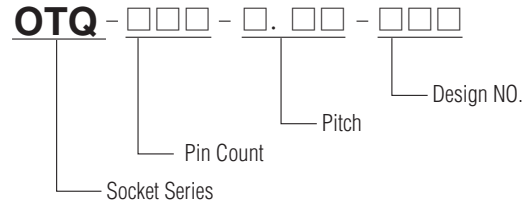
QFP

QUAD FLAT PACKAGE



- Better air flow.
- Vertical actuation is ideal for automation.
- Zero insertion force.
- Live bug.

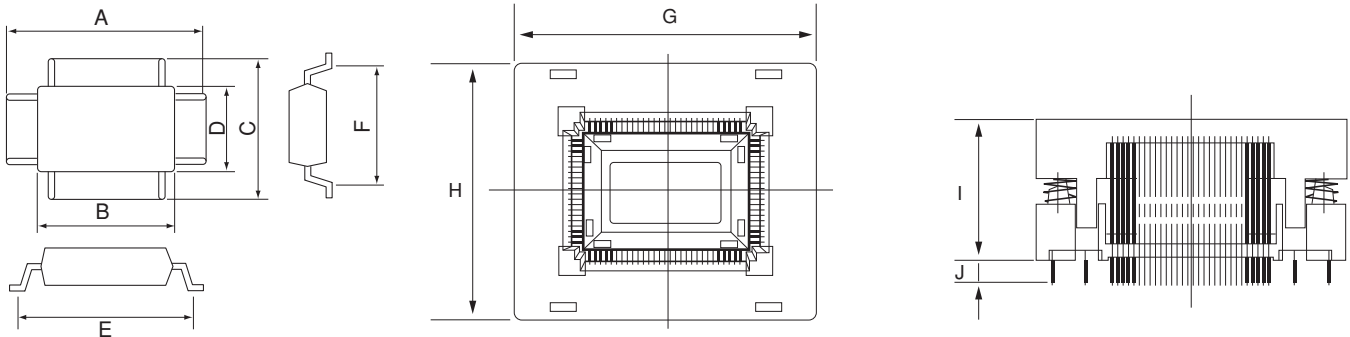
ORDERING PROCEDURE



Specification / 仕様	
Contact resistance (Initial) 接触抵抗 (初期値)	100mΩ (At 10 mA)
Maximum voltage 耐電圧	AC700V RMS (for 1 minute) Below 0.5mm Pitch AC500V RMS (for 1 minute)
Insulation resistance 絶縁抵抗	1,000MΩ or higher (AC DC 500V)
Rated current 許容電流値	1A
Operating temperature range 使用温度	-65°C ~ +150°C
Terminal strength against pulling 端子抜け強度	0.5kgf (1 min)
Insertion 機械寿命	Min. 10,000 times (mechanical)
MATERIAL / 材質	
Body 本体	PEI, PES
Contact コンタクト	BeCu, Au plating (Ni-base)

※RoHS compliant

APPLICABLE IC DIMENSIONS & SOCKET DIMENSIONS



Applicable IC/QFP

OPEN TOP TYPE SOCKET

PINCH CONTACT (QFP·LQFP)

Unit: mm (in)

PART NO.	PIN COUNT	PITCH	ACTUATION FORCE	APPLICABLE IC DIMENSIONS (REF.)						OUTSIDE DIMENSIONS (REF.)				REMARKS
				A	B	C	D	E	F	G	H	I	J	
OTQ-64-0.5-03	64	0.5 (19.6mil)	max 1.3kgf	12±0.15 (0.412)	max10.5 (0.413)	12±0.15 (0.412)	max10.5 (0.413)	11±0.1 (0.433)	11±0.1 (0.433)	26.2 (1.030)	26.2 (1.030)	16.5 (0.650)	3 (0.118)	
OTQ-64-0.8-01	64	0.8 (32mil)	max 4.0kgf	17.2±0.2 (0.677)	14±0.2 (0.551)	17.2±0.2 (0.677)	14±0.2 (0.551)	max 16.6 (0.653)	max 16.6 (0.653)	34 (1.338)	34 (1.338)	16 (0.629)	2.5 (0.098)	
OTQ-64-0.8-02	64	0.8 (32mil)	max 4.0kgf	16.4±0.2 (0.645)	14±0.2 (0.551)	16.4±0.2 (0.645)	14±0.2 (0.551)	max 15.6 (0.614)	max 15.6 (0.614)	34 (1.338)	34 (1.338)	16 (0.629)	2.5 (0.098)	
OTQ-64-1.0-01	64	1.0 (39mil)	max 3.0kgf	25.4±0.2 (1.000)	20±0.2 (0.787)	19.4±0.2 (0.763)	14±0.2 (0.559)	max 24 (0.944)	max 18 (0.708)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-64-1.0-02	64	1.0 (39mil)	max 3.0kgf	24.6±0.2 (0.968)	20±0.2 (0.787)	18.6±0.2 (0.732)	14±0.2 (0.559)	max 23 (0.905)	max 17 (0.669)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-64-1.0-03	64	1.0 (39mil)	max 3.0kgf	23.9±0.2 (0.940)	20±0.2 (0.787)	17.9±0.2 (0.704)	14±0.2 (0.559)	max 22.6 (0.889)	max 16.6 (0.653)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-80-0.65-07	80	0.65 (26mil)	max 4.0kgf	17.2±0.2 (0.677)	14±0.2 (0.551)	17.2±0.2 (0.677)	14±0.2 (0.559)			33.4 (1.315)	33.4 (1.315)	17.5 (0.689)	3 (0.118)	Lead Guide
OTQ-80-0.8-01	80	0.8 (32mil)	max 4.0kgf	25.4±0.2 (1.000)	20±0.2 (0.787)	19.4±0.2 (0.763)	14±0.2 (0.559)	max 24 (0.944)	max 18 (0.708)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-80-0.8-02	80	0.8 (32mil)	max 4.0kgf	24.6±0.2 (0.968)	20±0.2 (0.787)	18.6±0.2 (0.732)	14±0.2 (0.559)	max 23 (0.905)	max 17 (0.669)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-80-0.8-03	80	0.8 (32mil)	max 4.0kgf	23.9±0.2 (0.940)	20±0.2 (0.787)	17.9±0.2 (0.704)	14±0.2 (0.559)	max 22.6 (0.889)	max 16.6 (0.653)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-100-0.5-11	100	0.5 (19.6mil)	max 3.3kgf	16±0.15 (0.630)	14±0.03 (0.551)	16±0.15 (0.630)	14±0.03 (0.551)	15±0.1 (0.591)	15±0.1 (0.591)	31 (1.220)	31 (1.220)	16.5 (0.650)	2.5 (0.098)	Mold Guide
OTQ-100-0.65-27	100	0.65 (26mil)	max 4.5kgf	23.9±0.2 (0.940)	20±0.2 (0.787)	17.9±0.2 (0.704)	14±0.2 (0.559)	max 22.6 (0.889)	max 16.6 (0.653)	42 (1.653)	36 (1.417)	17 (0.669)	2.5 (0.098)	
OTQ-100-0.65-16	100	0.65 (26mil)	max 3.3kgf	23.2 (0.913)	20 (0.787)	17.2 (0.677)	14 (0.551)	21 (0.827)	15 (0.614)	38 (1.496)	31.0 (1.268)	16.5 (0.650)	2.6 (0.102)	
OTQ-100-0.65-23	100	0.65 (26mil)	max 3.2kgf	22 (0.866)	20 (0.787)	16 (0.630)	14 (0.551)	21 (0.827)	15 (0.614)	37 (1.457)	31.0 (1.220)	16 (0.650)	2.6 (0.102)	

PINCH CONTACT (TQFP)

Unit: mm (in)

PART NO.	PIN COUNT	PITCH	ACTUATION FORCE	APPLICABLE IC DIMENSIONS (REF.)						OUTSIDE DIMENSIONS (REF.)				REMARKS
				A	B	C	D	E	F	G	H	I	J	
OTQ-32-0.8-02	32	0.8 (32mil)	max 3.0kgf	9±0.1 (0.354)	7±0.1 (0.275)	9±0.1 (0.354)	7±0.1 (0.275)	max 8.1 (0.318)	max 8.1 (0.318)	25.5 (1.003)	25.5 (1.003)	17.5 (0.688)	2.5 (0.098)	SQFP/TQFP
OTQ-44-0.8-04	44	0.8 (32mil)	max 3.5kgf	12±0.1 (0.472)	10±0.1 (0.393)	12±0.1 (0.472)	10±0.1 (0.393)	max 11.1 (0.437)	max 11.1 (0.437)	28.4 (1.118)	28.4 (1.118)	17.5 (0.688)	3 (0.118)	
OTQ-48-0.5-03	48	0.5 (19.6mil)	max 1.7kgf	9±0.1 (0.354)	max7.6 (0.299)	9±0.15 (0.354)	max7.6 (0.299)	8±0.1 (0.315)	8±0.1 (0.315)	24 (0.945)	24 (0.945)	16.5 (0.650)	2.6 (0.102)	Mold Guide
OTQ-48-0.5-10	48	0.5 (19.6mil)	max 1.7kgf	9±0.15 (0.354)	max7.6 (0.299)	9±0.15 (0.354)	max7.6 (0.299)	8±0.1 (0.315)	8±0.1 (0.315)	24 (0.945)	24 (0.945)	16.5 (0.650)	2.6 (0.102)	Lead Guide
OTQ-52-0.65-03	52	0.65 (26mil)	max 4.0kgf	12±0.1 (0.472)	10±0.1 (0.393)	12±0.1 (0.472)	10±0.1 (0.393)	max 11.1 (0.437)	max 11.1 (0.437)	28.4 (1.118)	28.4 (1.118)	17.5 (0.688)	3.5 (0.137)	
OTQ-52-0.65-04	52	0.65 (26mil)	max 1.1kgf	12±0.15 (0.412)	max10.5 (0.413)	12±0.15 (0.412)	max10.5 (0.413)	11±0.1 (0.433)	11±0.1 (0.433)	26.2 (1.030)	26.2 (1.030)	16.5 (0.650)	3 (0.118)	
OTQ-64-0.5-04	64	0.5 (19.6mil)	max 1.3kgf	12±0.15 (0.412)	max10.5 (0.413)	12±0.15 (0.412)	max10.5 (0.413)	11±0.1 (0.433)	11±0.1 (0.433)	26.2 (1.030)	26.2 (1.030)	16.5 (0.650)	3 (0.118)	
OTQ-64-0.65-04	64	0.65 (26mil)	max 2.1kgf	14±0.15 (0.551)	max12.6 (0.499)	14±0.15 (0.551)	max12.6 (0.499)	13±0.1 (0.512)	13±0.1 (0.512)	29 (1.142)	29 (1.142)	16.5 (0.650)	2.6 (0.102)	Mold Guide
OTQ-64-0.65-08	64	0.65 (26mil)	max 2.1kgf	14±0.15 (0.551)	max12.6 (0.496)	14±0.15 (0.551)	max12.6 (0.496)	13±0.1 (0.512)	13±0.1 (0.512)	29 (1.142)	29 (1.142)	16.5 (0.650)	2.6 (0.102)	Lead Guide
OTQ-80-0.5-05	80	0.5 (19.6mil)	max 2.7kgf	14±0.15 (0.551)	max12.6 (0.499)	14±0.15 (0.551)	max12.6 (0.499)	13±0.1 (0.512)	13±0.1 (0.512)	29 (1.142)	29 (1.142)	16.5 (0.650)	2.6 (0.102)	Mold Guide
OTQ-80-0.5-16	80	0.5 (19.6mil)	max 2.7kgf	14±0.15 (0.551)	max12.6 (0.496)	14±0.15 (0.551)	max12.6 (0.496)	13±0.1 (0.512)	13±0.1 (0.512)	29 (1.142)	29 (1.142)	16.5 (0.650)	2.6 (0.102)	Lead Guide
OTQ-80-0.65-05	80	0.65 (26mil)	max 6.5kgf	16±0.1 (0.629)	14±0.1 (0.551)	16±0.1 (0.629)	14±0.1 (0.551)	max 15.1 (0.594)	max 15.1 (0.594)	32.4 (1.275)	32.4 (1.275)	17.5 (0.688)	3 (0.118)	
OTQ-100-0.65-22	100	0.65 (26mil)	max 3.3kgf	23.2±0.05 (0.913)	20±0.4 (0.787)	17.2±0.05 (0.677)	14±0.1 (0.551)	max 15.6 (0.551)	max 15.6 (0.551)	32.2 (1.268)	32.2 (1.268)	16.5 (0.650)	2.6 (0.102)	Mold Guide
OTQ-112-0.65-02	112	0.65 (26mil)	max 5.6kgf	22 (0.866)	20 (0.787)	22 (0.866)	20 (0.787)			38 (1.496)	38 (1.496)	17.5 (0.688)	3 (0.118)	
OTQ-128-0.5-13	128	0.5 (19.6mil)	max 3.2kgf	22±0.05 (0.866)	16±0.05 (0.63)	22±0.05 (0.866)	16±0.05 (0.63)	20±0.03 (0.787)	14±0.03 (0.551)	37 (1.457)	31 (1.22)	16.5 (0.65)	3 (0.118)	Mold Guide
OTQ-160-0.65-05	160	0.65 (26mil)	max 3.5kgf	31.2±0.05 (1.228)	max27.85 (1.096)	31.2±0.05 (1.228)	max27.85 (1.096)	28±0.05 (1.102)	28±0.05 (1.102)	46.2 (1.819)	46.2 (1.819)	16.5 (0.6450)	3 (0.118)	Mold Guide
OTQ-176-0.5-04	176	0.5 (19.6mil)	max 3.8kgf	26.1±0.15 (1.023)	max24.5 (0.964)	26.1±0.15 (1.023)	max24.5 (0.964)	25 (0.984)	25 (0.984)	41 (1.614)	41 (1.614)	16.5 (0.650)	3 (0.118)	
OTQ-208-0.5-09	208	0.5 (19.6mil)	max 4.5kgf	30.6±0.15 (1.204)	28 (1.102)	30.6±0.15 (1.204)	28 (1.102)			45.6 (1.800)	45.6 (1.800)	16.5 (0.650)	3 (0.118)	
OTQ-208-0.5-10	208	0.5 (19.6mil)	max 4.5kgf	30±0.1 (1.180)	max28.5 (1.121)	30±0.1 (1.180)	max28.5 (1.121)	29±0.1 (1.141)	29±0.1 (1.141)	45 (1.776)	45 (1.776)	16.5 (0.650)	3 (0.118)	

Ground Pin Socket Lineup(All of sockets are with side loaded type of contact pin)

Unit: mm

PART NO.	PIN COUNT	PITCH	ACTUATION FORCE	APPLICABLE IC DIMENSIONS (REF.)						OUTSIDE DIMENSIONS REF.)				Ground Pin	Ground Pin Tail Length	REMARKS	
				A	B	C	D	E	F	G	H	I	J				
OTQ-48SG-0.5-001	48	0.5	max2.0kgf	9	7	9	7	8	8	24	24	17.1	2.2	Thermal Button	5.9	LQFP	19mm socket OD is also available with smaller cover
OTQ-48SS-0.5-001	48	0.5	max1.0kgf	9	7	9	7	8	8	15	15	16.6	2.8	—	—	LQFP	Smaller Socket OD
OTQ-48SS-0.5-002	48	0.5	max1.0kgf	9	7	9	7	8	8	15	15	16.6	2.8	—	—	TQFP	Smaller Socket OD
OTQ-64-0.4-0.1	64	0.4	max1.7kgf	9	7	9	7	8	8	24	24	19	3	—	—	LQFP	
OTQ-64-0.4-02	64	0.4	max1.7kgf	9	7	9	7	8	8	24	24	19	3	—	—	LQFP	
OTQ-64G-0.4-03	64	0.4	max1.7kgf	9	7	9	7	8	8	24	24	19	3	Stamped Pin	3	LQFP	
OTQ-64SG-0.5-001	64	0.5	max2.0kgf	12	10	12	10	11	11	26.2	26.2	17.1	2.2	Thermal Button	5.9	LQFP TQFP	22mm socket OD is also available with smaller cover
OTQ-64S-0.5-002	64	0.5	max2.0kgf	12	10	12	10	11	11	22	22	17.1	2.2	—	—	LQFP	Smaller Socket OD
OTQ-64SS-0.5-001	64	0.5	max1.8kgf	12	1	12	10	11	11	18	18	16.6	2.6	—	—	LQFP	Smaller Socket OD
OTQ-80SG-0.4-001	80	0.4	max2.5kgf	12	10	12	10	10.8	10.8	22	22	17.1	2.2	Thermal Button	5.9	TQFP	
OTQ-80S-0.5-001	80	0.5	max2.2kgf	14	12	14	12	13	13	29	29	16.5	2.6	—	—	LQFP	
OTQ-80SG-0.5-001	80	0.5	max2.2kgf	14	12	14	12	13	13	29	29	16.5	2.6	Stamped Pin	2.6	LQFP	
OTQ-80S-0.5-002	80	0.5	max2.2kgf	14	12	14	12	13	13	29	29	16.5	2.6	—	—	TQFP	
OTQ-80SG-0.5-002	80	0.5	max2.2kgf	14	12	14	12	13	13	29	29	16.5	2.6	Stamped Pin	2.6	TQFP	
OTQ-100SG-0.4-001	100	0.4	max3.2kgf	14	12	14	12	12.8	12.8	24	24	17.1	2.2	Thermal Button	5.9	TQFP	
OTQ-100S-0.5-001	100	0.5	max2.5kgf	16	14	16	14	15	15	31.9	31.9	16.5	2.6	—	—	LQFP	
OTQ-100S-0.5-003	100	0.5	max2.5kgf	16	14	16	14	15	15	31.9	31.9	16.5	2.6	—	—	TQFP	
OTQ-128S-0.4-001	128	0.4	max4.0kgf	16	14	16	14	15	15	34	34	19	3	—	—	LQFP	
OTQ-128SG-0.4-001	128	0.4	max4.0kgf	16	14	16	14	15	15	34	34	19	3	Stamped Pin	3	LQFP	
OTQ-128SG-0.4-003	128	0.4	max4.0kgf	16	14	16	14	15	15	34	34	19	3	Stamped Pin	3	TQFP	
OTQ-144SG-0.4-001	144	0.4	max4.0kgf	18	16	18	16	16.8	16.8	28	28	17.1	2.2	Thermal Button	5.9	TQFP	
OTQ-144S-0.4-002	144	0.4	max4.0kgf	18	16	18	16	16.8	16.8	28	28	17.1	2.2	—	—	LQFP	
OTQ-144S-0.5-001	144	0.5	max3.8kgf	22	20	22	20	21	21	37	37	16.5	2.6	—	—	LQFP	
OTQ-144SG-0.5-001	144	0.5	max4.0kgf	22	20	22	20	21	21	37	37	16.5	2.6	Stamped Pin	2.6	LQFP	
OTQ-144SG-0.5-003	144	0.5	max3.8kgf	22	20	22	20	21	21	37	37	16.5	2.6	Stamped Pin	2.6	TQFP	
OTQ-144S-0.5-004	144	0.5	max3.1kgf	22	20	22	20	21	21	32	32	17.1	2.2	—	—	LQFP	Smaller Socket OD
OTQ-144SG-0.5-007	144	0.5	max4.0kgf	22	20	22	20	21	21	32	32	18	2.2	Hybrid type	5.9	TQFP	Smaller Socket OD
OTQ-176S-0.5-001	176	0.5	max4.9kgf	26	24	26	24	25	25	41	41	16.5	2.6	—	—	LQFP	
OTQ-176SG-0.5-001	176	0.5	max4.9kgf	26	24	26	24	25	25	41	41	16.5	2.6	Stamped Pin	2.6	LQFP	
OTQ-176SG-0.5-002	176	0.5	max4.9kgf	26	24	26	24	25	25	41	41	16.5	2.6	Thermal Button	6.5	LQFP	
OTQ-176SG-0.5-004	176	0.5	max4.9kgf	26	24	26	24	25	25	36	36	18	2.2	Hybrid type	6.5	LQFP	Smaller Socket OD

Applicable IC/QFPT • QFP OPEN TOP TYPE SOCKET

Ground Pin Socket Lineup(All of sockets are with side loaded type of contact pin)

Unit: mm

PART NO.	PIN COUNT	PITCH	ACTUATION FORCE	APPLICABLE IC DIMENSIONS (REF.)						OUTSIDE DIMENSIONS REF.)				Ground Pin	Ground Pin Tail Length	REMARKS	
				A	B	C	D	E	F	G	H	I	J				
OTQ-176-0.5-06	176	0.5	max3.3kgf	26	24	26	24	25	25	36	36	17.1	2.2	—	—	LQFP	
OTQ-208S-0.5-001	208	0.5	max4.9kgf	30	28	30	28	29	29	45	45	16.5	2.6	—	—	LQFP	
OTQ-208SG-0.5-001	208	0.5	max4.9kgf	30	28	30	28	29	29	45	45	16.5	2.6	Stamped Pin	2.6	LQFP	
OTQ-216(220)-0.4-001	216	0.4	max5.0kgf	26	24	26	24	25	25	41	41	19	3	—	—	LQFP	
OTQ-216SG-0.4-001	216	0.4	max5.0kgf	26	24	26	24	25	25	41	41	19	3	Stamped Pin	3	LQFP	
OTQ-256-0.4-01	256	0.4	max5.0kgf	30	28	30	28	29	29	45	45	19	3	—	—	LQFP	