

DIMENSIONS						
REF.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			1.6			0.063
A1	0.05		0.15	0.002		0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
B	0.17	0.22	0.27	0.007	0.009	0.011
C	0.09		0.20	0.003		0.0079
D		9.00			0.354	
D1		7.00			0.276	
D3		5.50			0.216	
e		0.50			0.020	
E		9.00			0.354	
E1		7.00			0.276	
E3		5.50			0.216	
L	0.45	0.60	0.75	0.018	0.024	0.030
L1		1.00			0.039	
K	0°	3.5°	7°	0°	3.5°	7°



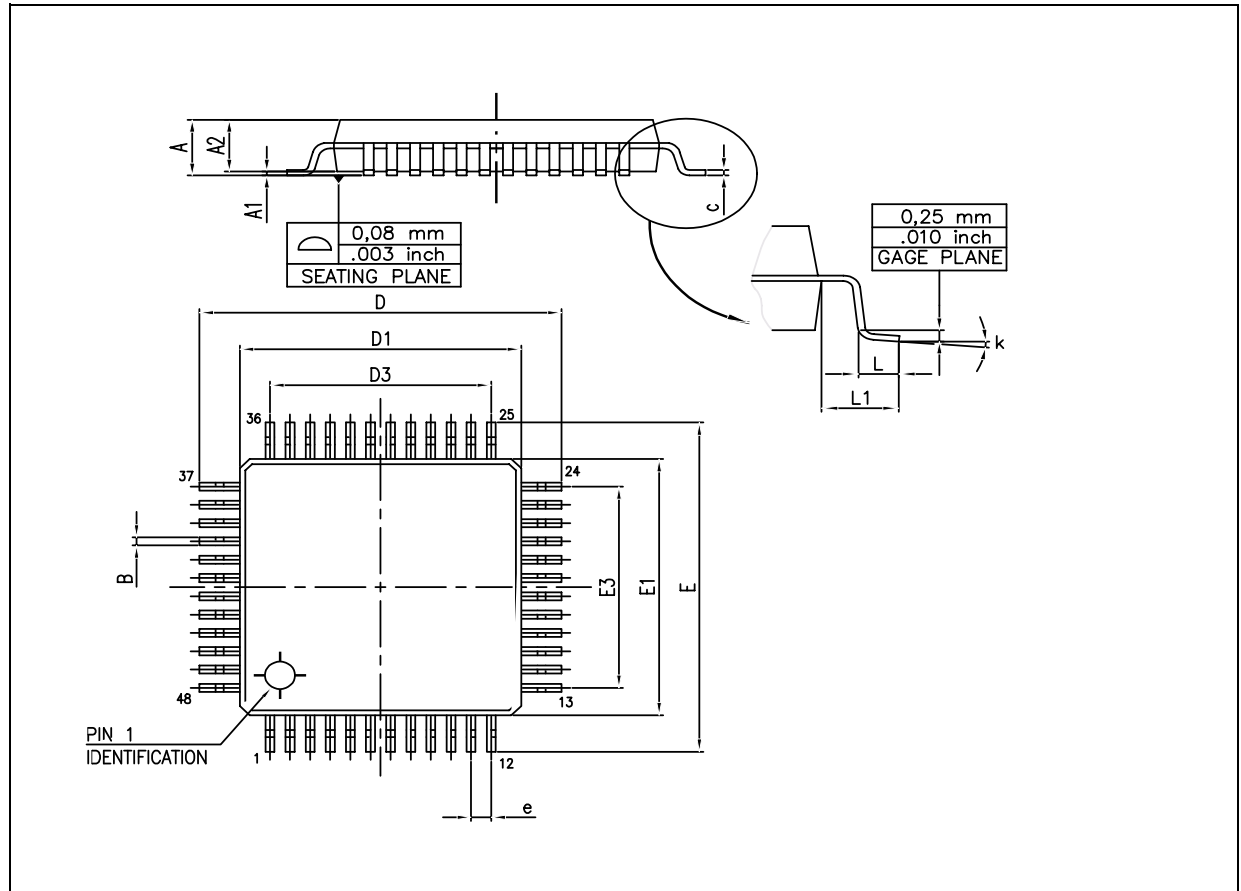
PACKAGE AND PACKING INFORMATION

48-LEAD THIN QUAD FLAT PACKAGE

Weight: not available



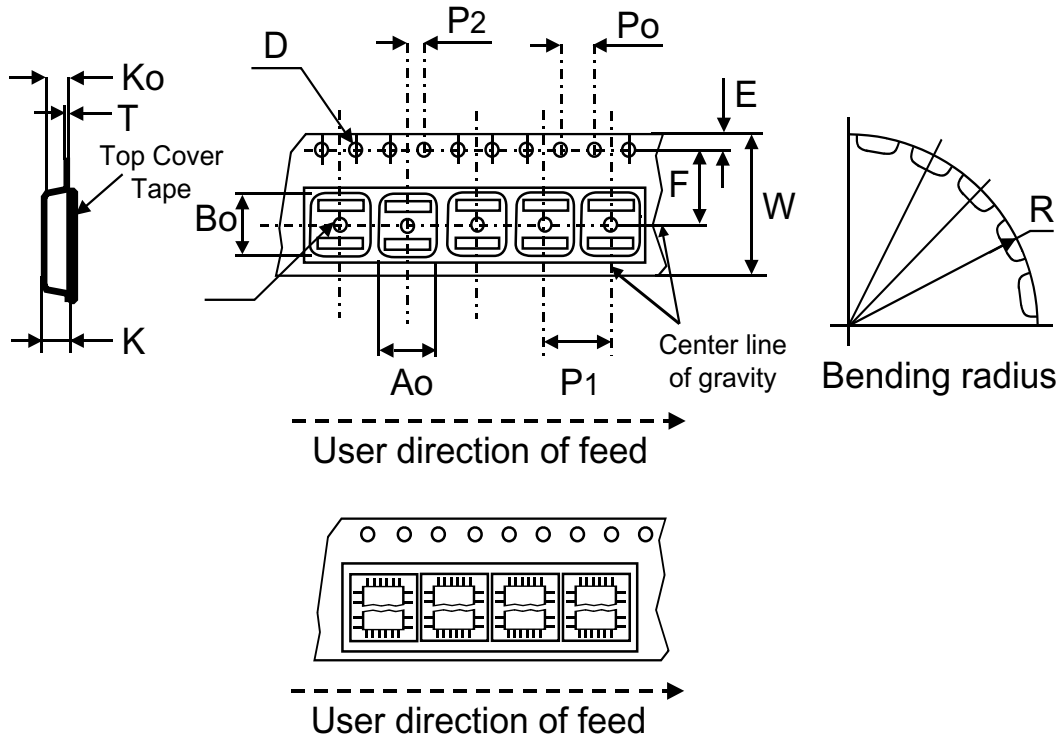
TQFP48



TQFP48 PACKAGE AND PACKING INFORMATION

TAPE & REEL SHIPMENT INFORMATION

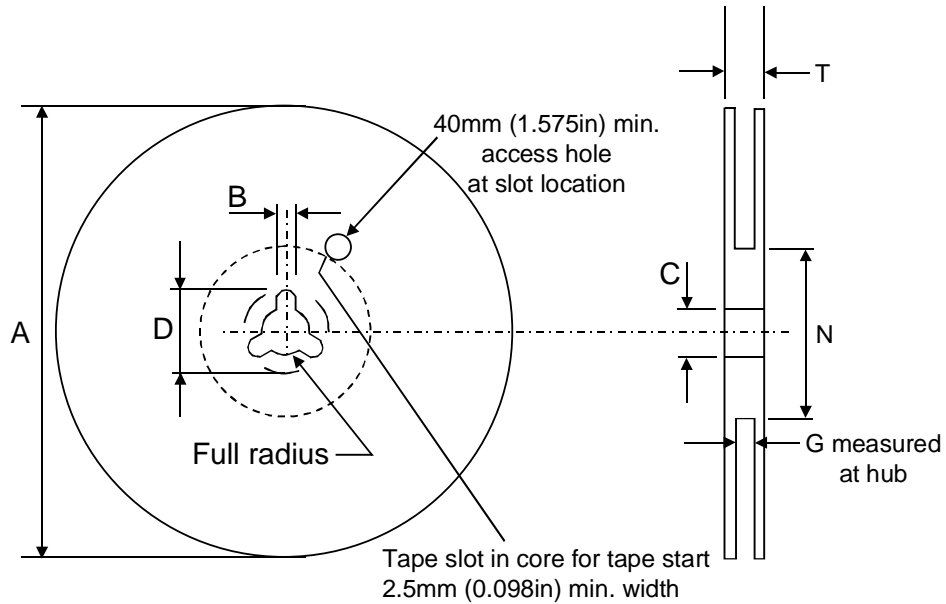
TAPE SPECIFICATIONS



TAPE MECHANICAL DATA		
	mm.	inch
D	1.50 +0.1/0	0.059 +0.004/0
E	1.75 ±0.1	0.069 ±0.004
Po	4.00 ±0.1	0.157 ±0.004
T max.	0.40	0.016
D1 min.	1.50	0.059
F	7.5 ±0.05	0.295 ±0.002
K max.	6.50	0.256
P2	2.00 ±0.05	0.079 ±0.002
R	40	1.575
W	16.00 ±0.30	0.630 ±0.012
P1	12.00	0.472
Ao, Bo, Ko	0.05 min to 0.90 max.	0.002 min to 0.035 max.

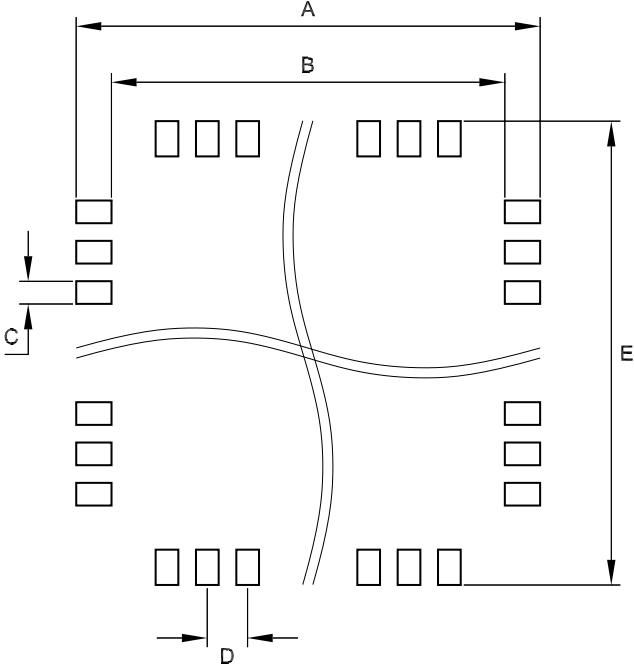
BASE QUANTITY	2400 pcs.
BULK QUANTITY	2400 pcs.

TAPE & REEL SHIPMENT INFORMATION
REEL SPECIFICATIONS



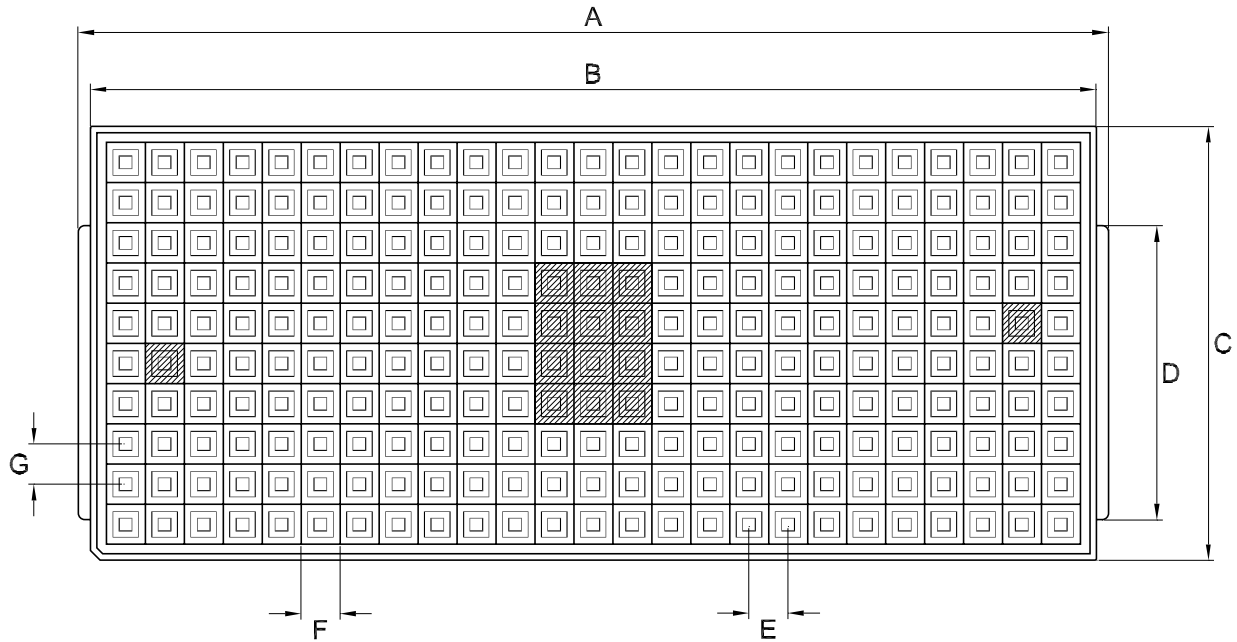
REEL MECHANICAL DATA		
	mm.	inch
Tape size	16.0 ±0.30	0.630 ±0.012
A max.	330.0	12.992
B min.	1.5	0.059
C	13.0 ±0.20	0.512 ±0.008
D min.	20.2	0.795
N min.	60	2.362
G	16.4 +2/-0	0.646 +0.079/-0
T max.	22.4	0.882

FOOTPRINT RECOMMENDED DATA



FOOTPRINT DATA		
	mm.	inch
A	9.40	0.370
B	7.70	0.303
C	0.32	0.012
D	0.50	0.020
E	9.4	0.370

TRAY SHIPMENT INFORMATION



TRAY DATA		
	mm.	inch
A	322.6	12.700
B	315.0 ±0.10	12.402 ±0.004
C	135.9 ±0.10	5.350 ±0.004
D	92.1 ±0.10	3.626 ±0.004
E	12.2 ±0.10	0.480 ±0.004
F	12.2 ±0.10	0.480 ±0.004
G	12.2 ±0.10	0.480 ±0.004

BASE QUANTITY	250 pcs.
BULK QUANTITY	1500 pcs.