imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

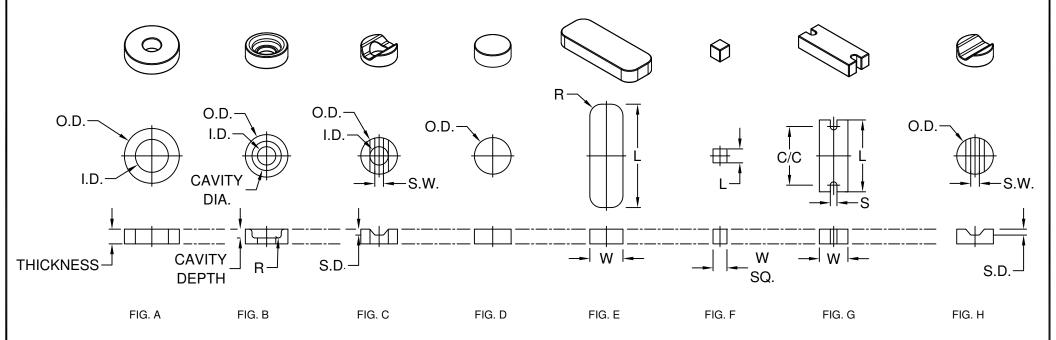


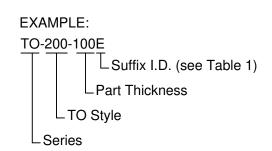
Contact us

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REV.	DESCRIPTION	DATE	APPROVED
C	Updated Part Thickness Offered	09/08/10	T. Y.
D	Corrected TO-13 OD Typo	07/03/12	T. Y.
ш	Added Figure H	07/18/12	T. Y.
F	Removed Part Numbers from Part Offering, Table 1	07/01/14	J. C.
ß	Removed Part Numbers, See Page 2	03/06/15	J. C.
Н	Add Part Number, See Page 2	03/31/15	J. C.
J	Engineering Update w/o Changes	05/13/16	J. C.
Κ	Corrected Typo Dimensions on Page 2 & 3	07/29/16	J. C.





SUFFIX I.D.	I.D. DESCRIPTION	NOTES
NONE	Wax	Offered for all part numbers.
E	Effervescent	Offered for all part numbers.
CR	Color Removed	Offered for all part numbers.
DR	Detergent Removed	Offered for all part numbers.
Н	Salt	Not offered for P/Ns: TO-10, TO-11, TO-64, TO-65, TO-68.
ХН	Extra Hard	Not offered for P/Ns: TO-10, TO-11, TO-64, TO-65, TO-68.

TABLE 1

STANDARD TOI (UNLESS OTHERWIS DECIMALS .X ±.1 .XX ±.01		EBINARR 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974			
		TITLE:		DISS-O-	PADS.
.XXX ±.005	$ $ $\forall \forall$	\	WASH-	AWAY SPA	
DESIGNED:	DATE:	PART NO:			REVISION:
D. Green	10/15/03		TO-X	XX-XXX	Κ
CHECKED:	DATE:	CAGE CODE :	32559	SHEET # 1	OF 3
M. Chen	10/15/03	CAD GENERATED DO			
1		OND GLIVERATED DO	JOONEINT, L	O NOT WEASURE	DITAWING.

DESCRIPTION SEE SHEET #1

REV

DATE APPROVED

TO-5

PART NO.	I.D.	O.D.	THICKNESS	FIG.	TO-5
TO-5	.225 (5.7mm)	.375 (9.5mm)	.030, .040, .050, .060, .070, .085, .090, .100, .120, .130, .150, .170, .200	А	Spacer
TO-6	.250 (6.4mm)	.375 (9.5mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150, .160, .180, .190	Α	I.C. Spacer
TO-9	.300 (7.6mm)	.437 (11.1mm)	.030, .040, .050, .070, .080, .090, .100, .120, .130, .150, .180, .200	A	-
TO-13	.225 (5.7mm)	.310 (7.9mm)	.030, .040, .050, .060, .070, .080, .090, .100, .120, .130, .150	Α	Epoxy Case

TO-18

PART NO.	I.D.	O.D.	CAVITY DIA.	CAVITY DEPTH	THICKNESS	FIG.	TO-18
TO-12	.125 (3.2mm)	.310 (7.9mm)	.215 (5.5mm)	.065 (1.7mm)	.080, .090, .100, .120, .130, .180	В	.250 (6.4mm) L.S.
TO-16	.125 (3.2mm)	.205 (5.2mm)	-	-	.030, .040, .045, .050, .060, .070, .080, .090, .100, .120, .130, .150, .175, .200	Α	Epoxy Case
TO-17	.170 (4.3mm)	.250 (6.4mm)	-	-	.030, .035, .040, .050, .060, .070, .090, .100, .120, .130, .140, .150, .170, .180, .200	А	Thin Walls
TO-18	.125 (3.2mm)	.250 (6.4mm)	-	-	.030, .040, .045, .050, .055, .060, .070, .080, .090, .100, .120, .125, .130, .150, .170, .190, .200, .250	А	Standard
TO-20	.125 (3.2mm)	.290 (7.4mm)	.200 (5.1mm)	.065 (1.7mm)	.070, .090, .100, .120, .130, .150	В	.200 (5.1mm) L.S.
TO-27	.125 (3.2mm)	.290 (7.4mm)	-	-	.030, .040, .050, .060, .070, .090, .100, .120, .130	Α	Heavy Walls

AXIAL

PART NO.	I.D.	O.D.	THICKNESS	SLOT DEPTH	SLOT WIDTH	FIG.
TO-21	.125 (3.2mm)	.250 (6.4mm)	.050, .070, .080, .090, .100, .120, .130, .150, .170, .200, .230, .250	.045 (1.1mm)	.060 (1.5mm)	С
TO-35	-	.440 (11.2mm)	.100, .120, .130, .140, .150, .170, .180, .190, .220, .230, .250	.065 (1.7mm)	.230 (5.8mm)	Н
TO-36	-	.187 (4.7mm)	.050, .060, .070, .080, .090, .100, .120, .130, .150	.040 (1.0mm)	.080 (2.0mm)	Н
TO-37	-	.156 (4.0mm)	.050, .070, .080, .090, .100, .120	.025 (.64mm)	.050 (1.3mm)	Н

ON-END/CORDWOOD

PART NO.	I.D.	O.D.	CAVITY DIA.	CAVITY DEPTH	THICKNESS	FIG.
TO-7	.075 (1.9mm)	.175 (4.4mm)	-	-	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150, .180, .210	A
TO-8	.062 (1.6mm)	.156 (4.0mm)	-	-	.030, .035, .040, .050, .055, .060, .065, .070, .080, .085, .090, .100, .105, .120, .130, .150, .160, .190, .200, .210	A
TO-10	.040 (1.0mm)	.085 (2.2mm)	-	-	.025, .030, .040, .050, .060, .065, .070, .080, .090, .100	А
TO-11	.045 (1.1mm)	.100 (2.5mm)	-	-	.030, .040, .050, .060, .070, .080, .100, .110, .120	А
TO-26	.070 (1.8mm)	.187 (4.7mm)	-	-	.030, .040, .050, .060, .070, .090, .100, .120, .125, .150	А
TO-40	.045 (1.1mm)	.156 (4.0mm)	-	-	.030, .040, .050, .060, .070, .080, .090, .100, .120, .130, .150, .160	А
TO-64	.045 (1.1mm)	.140 (3.6mm)	-	-	.030, .035, .040, .050, .060, .070, .090, .100, .120, .125, .130, .140, .150, .160, .175	А
TO-65	.075 (1.9mm)	.140 (3.6mm)	-	-	.030, .035, .040, .045, .050, .060, .070, .080, .090, .100, .120, .125, .130, .150, .175	A
TO-67	.045 (1.1mm)	.140 (3.6mm)	.090 (2.3mm)	.025 (.64mm)	.050, .055, .060, .070, .090, .100, .120, .130	В
TO-68	.045 (1.1mm)	.110 (2.8mm)	.075 (1.9mm)	.025 (.64mm)	.040, .050, .055, .060, .070, .090, .100, .120, .130, .150, .160	В

SOLID

PART NO.	I.D.	O.D.	THICKNESS	FIG.
TO-29	-	.156 (4.0mm)	.040, .050, .060, .070, .090, .100, .120, .130	D
TO-31	-	.125 (3.2mm)	.040, .050, .060, .070, .090, .100, .120, .130	D
TO-32	-	.187 (4.7mm)	.030, .040, .050, .060, .070, .080, .090, .100, .120, .130	D
TO-33	-	.250 (6.4mm)	.030, .040, .050, .060, .070, .080, .090, .100, .120, .130	D
TO-34	-	.375 (9.5mm)	.040, .050, .060, .070, .090, .100, .120, .130, .250	D

STANDARD TO (UNLESS OTHERWIS DECIMALS		BIVAR®
.X ±.1 .XX ±.01	X° ±1°	4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974
	⊕ ∕	TITLE: DISS-O-PADS.
.XXX ±.005	\oplus	WASH-AWAY SPACERS
DESIGNED:	DATE:	PART NO: REVISION:
D. Green	10/15/03	TO-XXX-XXX K
CHECKED:	DATE:	CAGE CODE : 32559 SHEET # 2 OF 3
M. Chen	10/15/03	CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.

GENERAL PURPOSE

PART NO.	I.D.	O.D.	THICKNESS	FIG.
TO-46	.090 (2.3mm)	.250 (6.4mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150, .200, .240	A
TO-19	.250 (6.4mm)	.480 (12.2mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150, .190, .200, .230, .250	A
TO-22	.225 (5.7mm)	.437 (11.1mm)	.030, .040, .050, .060, .070, .080, .090, .100, .110, .120, .130, .150, .190, .200, .250	A
TO-23	.090 (2.3mm)	.310 (7.9mm)	.030, .040, .050, .055, .060, .070, .090, .100, .120, .130, .150, .180, .190, .200, .250	A
TO-24	.090 (2.3mm)	.340 (8.6mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150	A
TO-30	.275 (7.0mm)	.397 (10.0mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150	A
TO-25	.180 (4.6mm)	.480 (12.2mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150, .250	A
TO-28	.172 (4.4mm)	.343 (8.7mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .180, .190	A
TO-41	.156 (4.0mm)	.360 (9.1mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .140	A
TO-42	.250 (6.4mm)	.438 (11.1mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130	A

RECTANGULAR & SQUARE

PART NO.	L	W	R	THICKNESS	FIG.	
TO-100	.670 (17.0mm)	.100 (2.5mm)	.031 (.79mm)	.030, .035, .040, .045, .050, .060, .065, .070, .075, .080, .090, .100, .120, .130, .150, .200	E	Rectangular
TO-101	.562 (14.3mm)	.185 (4.7mm)	-	.030, .040, .050, .060, .070, .080, .090, .100, .120, .130, .150, .160, .220	E	Rectangular
TO-102	.505 (12.8mm)	.160 (4.1mm)	-	.040, .050, .060, .070, .090, .100, .120, .130, .150	E	Rectangular
TO-116	.666 (16.9mm)	.300 (7.6mm)	.063 (1.6mm)	.030, .040, .050, .055, .060, .065, .070, .075, .080, .090, .100, .110, .120, .125, .130, .150, .180, .200	E	Rectangular
TO-117	.666 (16.9mm)	.281 (7.1mm)	.100 (2.54mm)	.030, .040, .050, .060, .070, .080, .090, .100, .120, .125, .130, .140, .150, .160	E	Rectangular
TO-118	.705 (17.9mm)	.260 (6.6mm)	.080 (2.0mm)	.030, .040, .050, .060, .070, .080, .090, .100, .110, .120, .130, .150, .160, .170, .175, .200	E	Rectangular
TO-120	.085 (2.2mm)	.085 (2.2mm)	-	.030, .035, .040, .045, .050, .060, .070, .090, .100, .120	F	Square
TO-121	.095 (2.4mm)	.095 (2.4mm)	-	.030, .035, .040, .045, .050, .060, .070, .075, .085, .090, .095, .100, .120	F	Square

RADIAL & AXIAL DEVICE

PART NO.	C/C	S	W	L	THICKNESS	FIG.
TO-200	.100 (2.5mm)	.035 (.89mm)	.095 (2.4mm)	.190 (4.8mm)	.030, .035, .040, .050, .060, .070, .080, .090, .100, .120, .130, .150	G
TO-201	.150 (3.8mm)	.035 (.89mm)	.095 (2.4mm)	.240 (6.1mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .150	G
TO-203	.200 (5.1mm)	.035 (.89mm)	.095 (2.4mm)	.290 (7.4mm)	.030, .040, .050, .060, .070, .090, .100, .120, .130, .140, .150, .200	G
TO-204	.250 (6.4mm)	.040 (1.0mm)	.145 (3.7mm)	.340 (8.6mm)	.040, .050, .060, .070, .080, .090, .100, .120, .130, .150	G
TO-205	.300 (7.6mm)	.040 (1.0mm)	.145 (3.7mm)	.390 (9.9mm)	.040, .050, .060, .070, .090, .100, .120, .130, .150, .215	G
TO-206	.400 (10.2mm)	.045 (1.1mm)	.195 (5.0mm)	.490 (12.4mm)	.040, .050, .060, .070, .080, .090, .100, .120, .130, .150, .215	G
TO-207	.500 (12.7mm)	.045 (1.1mm)	.195 (5.0mm)	.590 (15.0mm)	.040, .050, .060, .070, .090, .100, .120, .130, .150	G

STANDARD TOLERANCE		
(UNLESS OTHERWISE SPECIFIED)		BIVAR
DECIMALS	ANGULAR	
.X ±.1	X° + 1°	4 THOMAS, IRVINE, CA. 92618
.XX +.01	X 1	TEL: (949) 951-8808 FAX: (949) 951-3974
		TITLE: DISS-O-PADS,
.XXX ±.005		WASH-AWAY SPACERS
DESIGNED:	DATE:	PART NO:
D. Green		TO-XXX-XXX K
D. Green	10/15/03	
CHECKED:	DATE:	CAGE CODE : 32559 SHEET # 3 OF 3
M. Chen	10/15/03	CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.