

Silicon Controlled Rectifiers (SCR's)

Type Selection Charts

RCA Types	Current			Voltage V_{DROM} V_{RROM} V	Max. Gate Char.		Switch Time	
	I_T (RMS) A	I_{TSM} 50/60 Hz A	Temp. T_C °C		I_{GT} mA	V_{GT} V	t_{gt} μs	t_q μs
C106 Family				3.5-A Types				
SENSITIVE-GATE TYPES				TO-202AB Pack.				
C106Q				15				
C106Y				30				
C106F				50				
C106A				100				
C106B	3.5	18.5/20	45	200	0.2	0.8	2.5	100
C106C				300				
C106D				400				
C106E				500				
C106M				600				
C107 Family				3.14-A Types				
SENSITIVE-GATE TYPES				TO-202AB Pack.				
C107Q				15				
C107Y				30				
C107F				50				
C107A				100				
C107B	3.14	14/15	45	200	0.5	0.8	2.5	100
C107C				300				
C107D				400				
C107E				500				
C107M				600				
C108 Family				5-A Types				
SENSITIVE-GATE TYPES				TO-202AB Pack.				
C108Q				15				
C108Y				30				
C108F				50				
C108A				100				
C108B	5	28/30	45	200	0.2	0.8	2.5	100
C108C				300				
C108D				400				
C108E				500				
C108M				600				
S106 Family				4-A Types				
SENSITIVE-GATE TYPES				TO-202AB Pack.				
S106Q				15				
S106Y				30				
S106F				50				
S106A				100				
S106B	4	17/20	60	200	0.2	0.8	2.5	100
S106C				300				
S106D				400				
S106E				500				
S106M				600				
S107 Family				4-A Types				
SENSITIVE-GATE TYPES				TO-202AB Pack.				
S107Q				15				
S107Y				30				
S107F				50				
S107A				100				
S107B	4	17/20	60	200	0.5	0.8	2.5	100
S107C				300				
S107D				400				
S107E				500				
S107M				600				
S122 Family				8-A Types				
STANDARD TYPES				TO-220AB Pack.				
S122F				50				
S122A				100				
S122B				200				
S122C	8	85/100	75	300	25	1.5	2.5	35
S122D				400				
S122E				500				
S122M				600				
S122S				700				
S206 Family				4-A Types				
SENSITIVE-GATE TYPES				TO-220AB Pack.				
S206Q				15				
S206Y				30				
S206F				50				
S206A				100				
S206B	4	28/35	85	200	0.2	0.8	25	100
S206C				300				
S206D				400				
S206E				500				
S206M				600				
S2061Q				15				
S2061Y				30				
S2061F				50				
S2061A				100				
S2061B	4	28/35	85	200	0.5	0.8	25	100
S2061C				300				
S2061D				400				
S2061E				500				
S2061M				600				
S2062Q				15				
S2062Y				30				
S2062F				50				
S2062A				100				
S2062B	4	28/35	85	200	2	0.8	25	100
S2062C				300				
S2062D				400				
S2062E				500				
S2062M				600				
S220 Family				2-A Types				
STANDARD TYPES				TO-8 Pack.				
2N3528				200				
2N3529	2	50/60	75	400	15	2	1.5	50
2N4102				600				
S260 Family				7-A Types				
STANDARD TYPES				"Low-Profile" TO-5 Pack.				
S2600B				200				
S2600D	7	85/100	60	400	15	1.5	2	50
S2600M				600				

Package Designations



H-967

JEDEC DO-1/
DO-210AA



H-1167

JEDEC
DO-4/
DO-203MA



H-1113R1

JEDEC DO-5/
DO-203MB



H-1695

JEDEC
DO-15/
DO-204AB



H-1026

TO-1
Two-Lead



H-1811

2N6032 2N6033
Modified TO-3
(0.60-In.-Dia. Pins)



H-1570

JEDEC TO-3/
TO-204MA



H-1627

2N5575 2N5578
Modified TO-3
(0.060-In.-Dia. Pins)



H-1015

JEDEC TO-8



H-1380

JEDEC TO-5/
TO-205MA



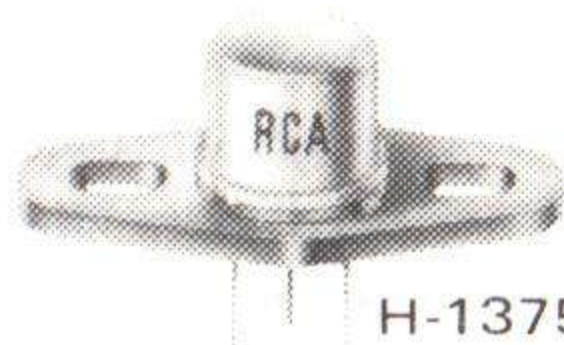
H-1599

TO-5
Low-Profile



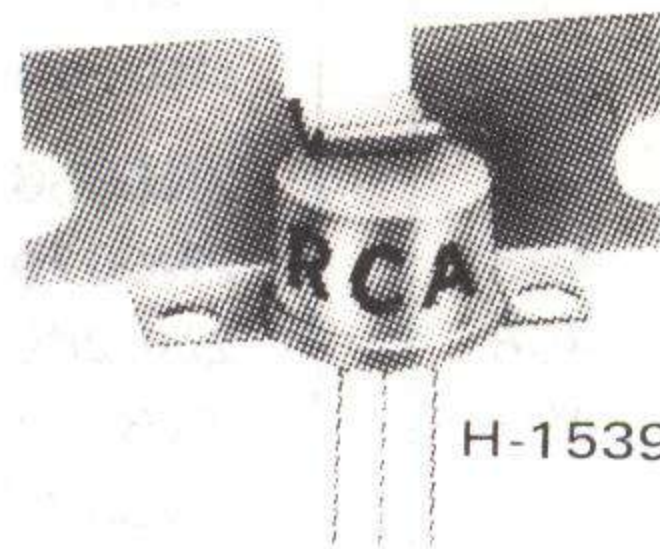
H-1381

JEDEC
TO-39/TO-
205MD



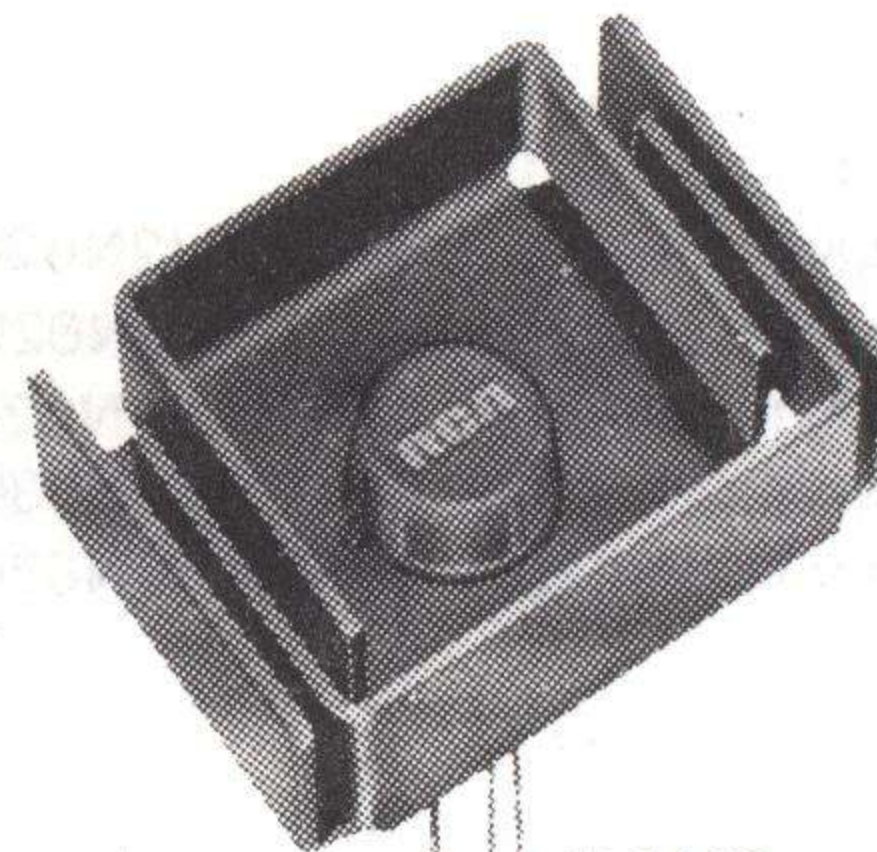
H-1375

TO-39/TO-5
with Flange



H-1539

TO-5
with Heat Spreader



H-1468

TO-39/TO-5
with Heat Radiator



H-1642

"Plastic TO-5"



H-1756

"Plastic TO-5"
with Heat Clip



H-1612

JEDEC TO-48/
TO-209MA



H-1307

JEDEC TO-60/
TO-212MA



H-1785

JEDEC TO-63/
TO-211MF

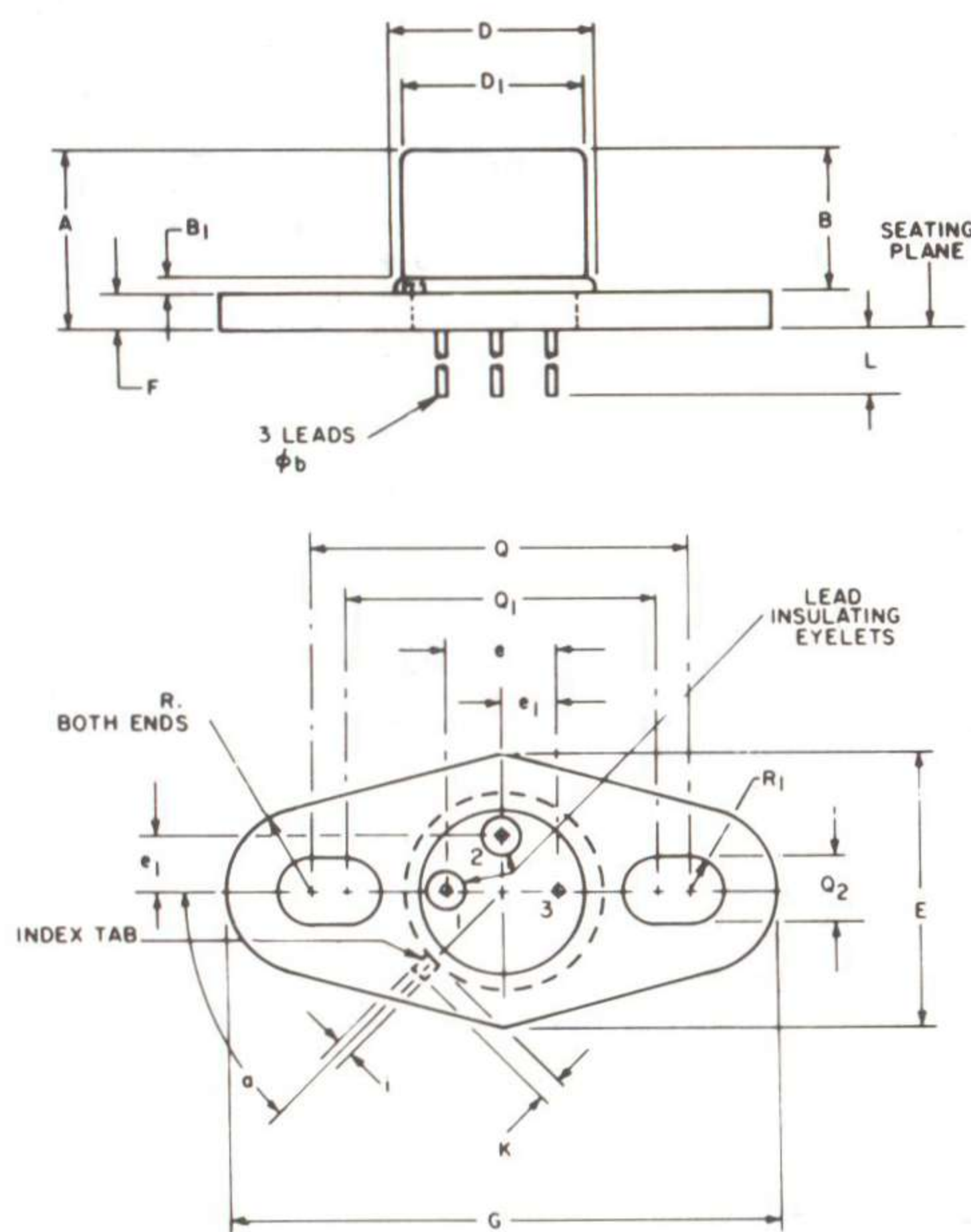


H-1340

JEDEC TO-66/
TO-213MA

Dimensional Outlines

TO-39/TO-5 WITH FLANGE



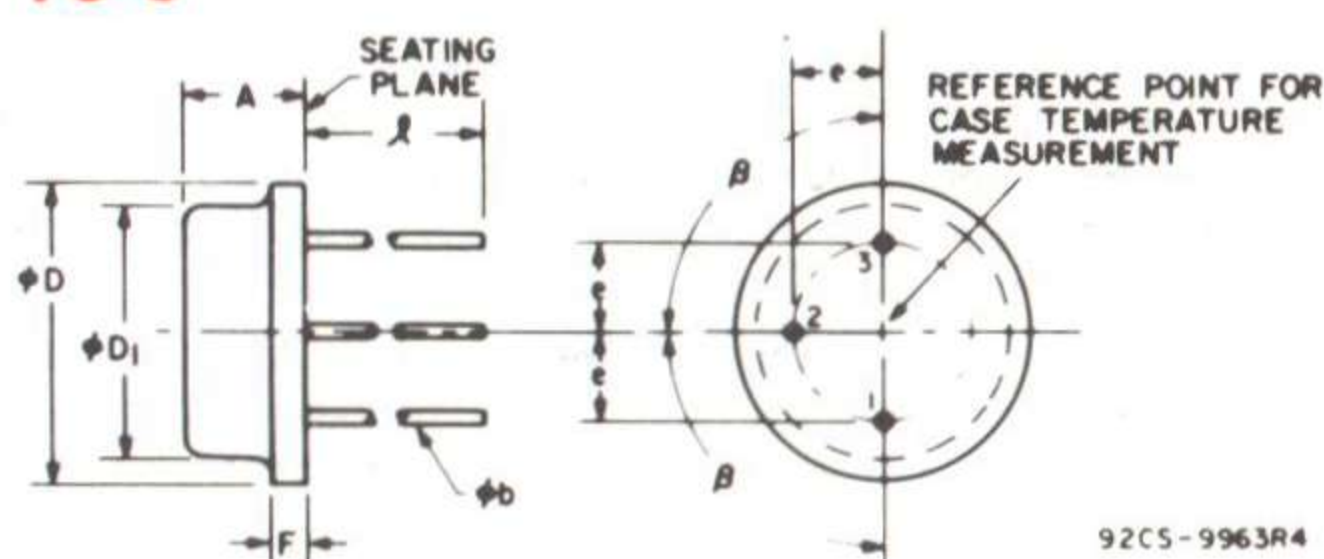
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	—	0.328	—	8.33	
B	0.240	0.260	6.10	6.60	
B ₁	0.009	0.125	0.229	3.18	
ϕ _b	0.016	0.019	0.406	0.483	
D	0.335	0.370	8.51	9.40	
D ₁	0.305	0.335	7.75	8.51	
E	0.495	0.505	12.57	12.83	
e	0.200 T.P.		5.08 T.P.		1
e ₁	0.100 T.P.		2.54 T.P.		1
F	0.062	0.068	1.57	1.74	
G	0.995	1.005	25.27	25.53	
i	0.028	0.034	0.711	0.864	
k	0.029	0.045	0.737	1.14	
L long lead	1.430	—	36.32	—	
L short lead	0.430	—	10.92	—	
Q	0.685	0.691	17.40	17.55	
Q ₁	0.559	0.565	14.20	14.35	
Q ₂	0.128	0.132	3.25	3.35	
R	0.156 T.P.		3.96 T.P.		1
R ₁	0.064	0.066	1.63	1.67	
α	45° T.P.		—	—	1, 2

NOTES:

1. True position.
2. Tab centerline.

92CS-22333

TO-8



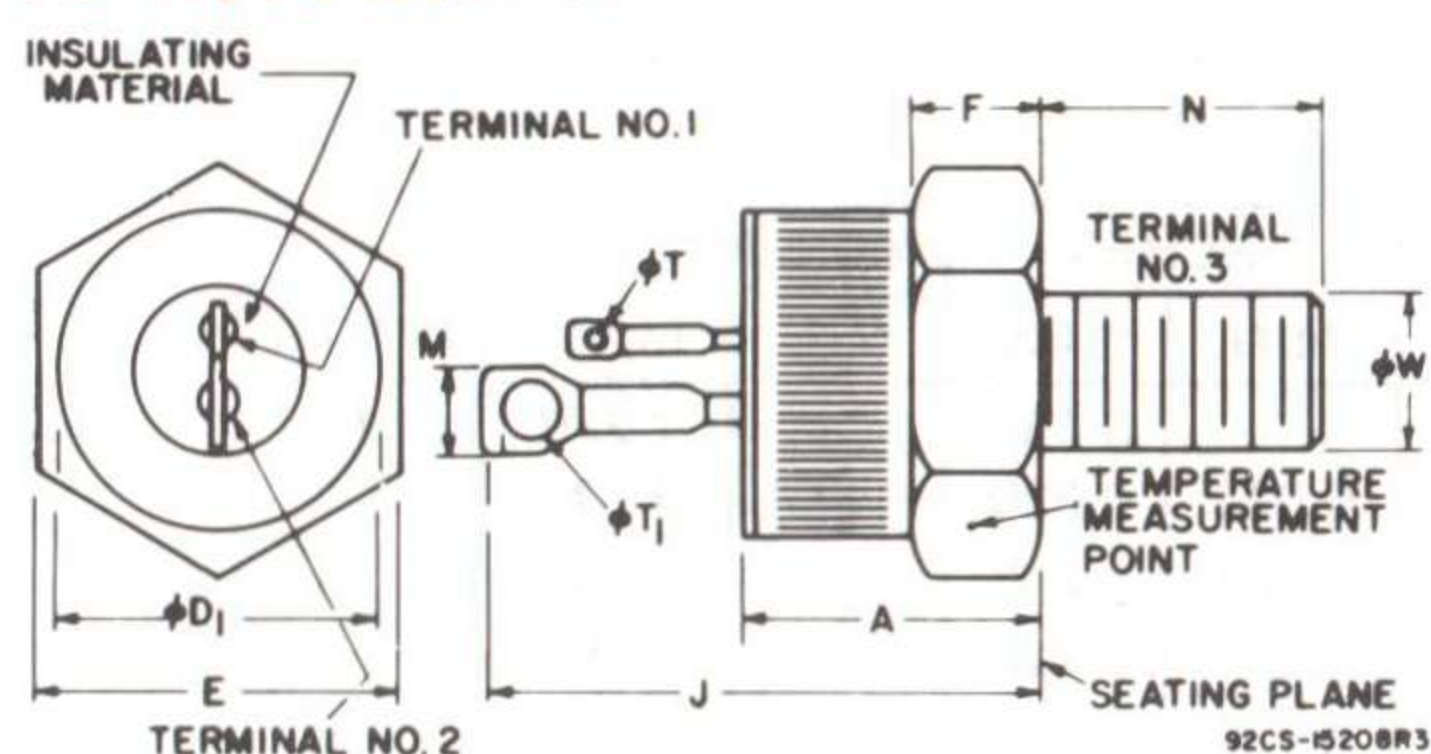
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	0.270	0.330	6.86	8.38	—
ϕ _b	0.027	0.033	0.686	0.838	1
ϕD	0.550	0.650	13.97	16.51	—
ϕD ₁	0.444	0.524	11.28	13.31	—
e	0.136	0.146	3.45	3.71	—
F	—	0.115	—	2.92	—
ℓ	0.360	0.440	9.14	11.18	1
ℓ	90 NOMINAL		—	—	—

NOTE:

1. Three leads.

92CS-9963R4

TO-48/TO-209MA



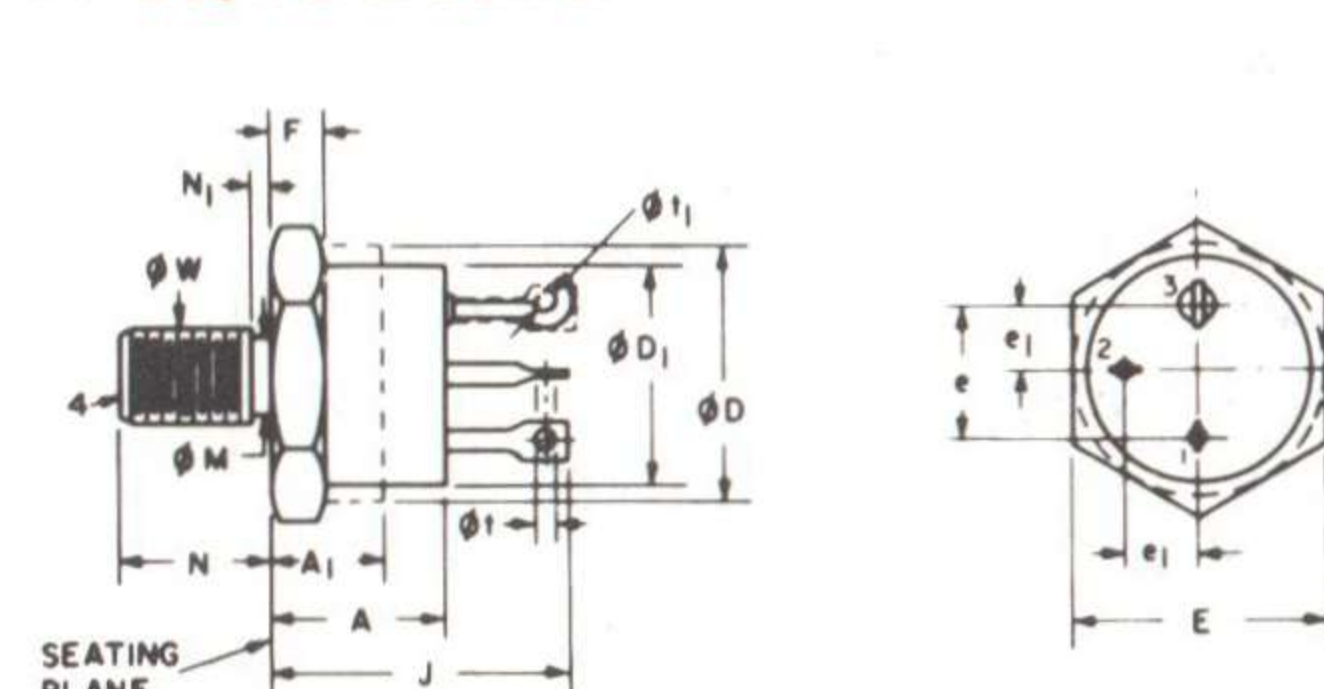
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	0.330	0.505	8.4	12.8	—
ϕD ₁	—	0.544	—	13.81	—
E	0.544	0.562	13.82	14.28	—
F	0.113	0.200	2.87	5.08	—
J	0.950	1.100	24.13	27.94	—
M	0.215	0.225	5.46	5.71	—
N	0.422	0.453	10.72	11.50	—
ϕT	0.050	0.068	1.27	1.73	—
ϕT ₁	0.138	0.148	3.51	3.75	—
ϕW	1/4-28 UNF-2A		1/4-28 UNF-2A		1

REF: Screw Thread Standards for Federal Services, Handbook H28, Part I. Recommended Torque: 25 inch-pounds.

- NOTE:
1. ϕW is pitch diameter of coated threads.

92CS-1520R3

TO-63/TO-211MB



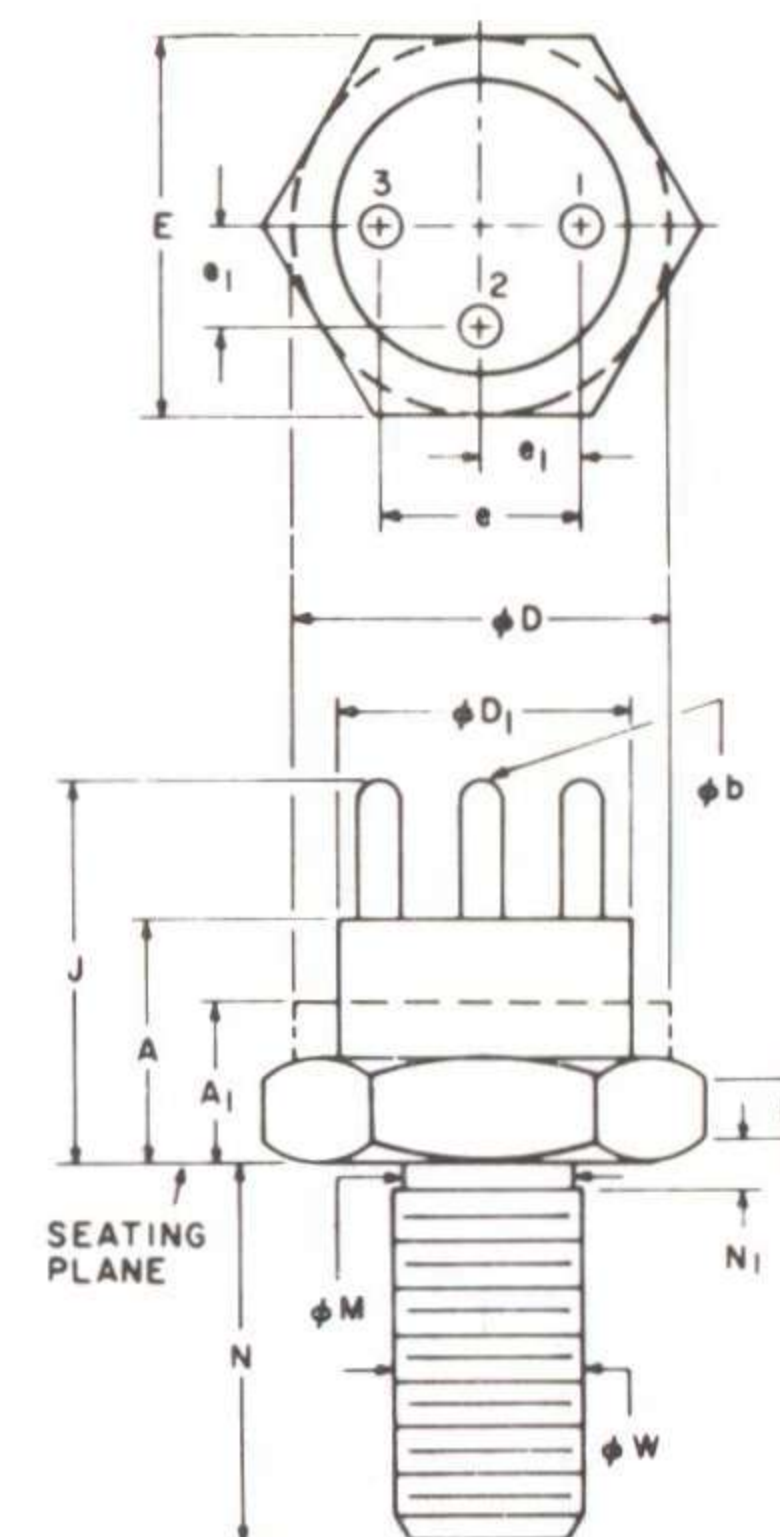
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	0.480	0.535	12.19	13.59	
A ₁	—	0.300	—	7.62	2
ϕD	0.775	0.875	19.69	22.23	2
ϕD ₁	0.745	0.775	18.92	19.69	
E	0.865	0.875	21.72	22.23	
e	0.485	0.515	12.32	13.08	5
e ₁	0.240	0.260	6.10	6.60	5
F	0.090	0.167	2.29	4.24	1
J	0.937	1.030	23.80	26.16	
ϕM	0.278	0.312	7.06	7.92	
N	0.440	0.495	11.68	12.57	
N ₁	—	0.105	—	2.67	
ϕt	0.080	0.105	1.52	2.67	4
ϕt ₁	0.080	0.105	1.52	2.67	4
ϕW	0.2808	0.2854	7.127	7.248	3

3. PITCH DIAMETER: THREAD 5/16-24 UNF-2A (COATED). REFERENCE (SCREW THREAD STANDARDS FOR FEDERAL SERVICES - HANDBOOK H-28).
4. THIS TERMINAL CAN BE FLATTENED AND PIERCED OR HOOK TYPE.
5. POSITION OF LEADS IN RELATION TO THE HEXAGON IS NOT CONTROLLED.

- NOTES:
1. DIMENSION DOES NOT INCLUDE SEALING FLANGES.
 2. PACKAGE CONTOUR OPTIONAL WITHIN DIMENSIONS SPECIFIED.

92CS-20225

TO-60/TO-212MA



92CS-18019

SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	0.215	0.320	5.46	8.13	
A ₁	—	0.165	—	4.19	2
ϕ _b	0.030	0.046	0.762	1.17	4
ϕD	0.360	0.437	9.14	11.10	2
ϕD ₁	0.320	0.360	8.13	9.14	
E	0.424	0.437	10.77	11.10	
e	0.185	0.215	4.70	5.46	
ϕ ₁	0.090	0.110	2.29	2.79	
F	0.090	0.135	2.29	3.43	1
J	0.365	0.480	9.02	12.19	
ϕM	0.163	0.189	4.14	4.80	
N	0.375	0.455	9.53	11.56	
N ₁	—	0.078	—	1.98	
ϕW	0.1658	0.1697	4.212	4.310	3, 5

MILLIMETER DIMENSIONS ARE DERIVED FROM ORIGINAL INCH DIMENSIONS

NOTES:

1. Dimension does not include sealing flanges
2. Package contour optional within dimensions specified
3. Pitch diameter — 10-32 UNF 2A thread (coated)
4. Pin spacing permits insertion in any socket having a pin-circle diameter of 0.200 in. (5.08 mm) and contacts which will accommodate pins with a diameter of 0.030 in. (0.762 mm) min., 0.046 in. (1.17 mm) max.
5. The torque applied to a 10-32 hex nut assembled on the thread during installation should not exceed 12 inch-pounds.