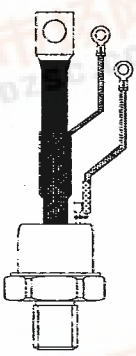


Inverter Type Thyristors

250 TO 550 AMPS RMS

international
IOR Rectifier

T-25-01

Part number	V_{RRM} V_{DRM} (V)	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	T_C (°C)	I_{TSM} (1)		V_{GT} (2) (V)	I_{GT} (2) (mA)	V_{TM} (3) (V)	t_q (5) (μs)	R_{thJC} DC (°C/W)	Case Outline Number	Notes	Case style								
					50Hz (A)	60Hz (A)																
ST333S02PCL ST333S02PCJ ST333S04PCL ST333S04PCJ ST333S06PCL ST333S06PCJ	200 200 400 400 600 600	520	330	75	7900	8270	3.0	200	1.51	15 25 15 25 15 25	0.110	T12 A	(4) (6)									
S30DGF2A0 S30DGF2B0 S30DGF4A0 S30DGF4B0 S30DGF6A0 S30DGF6B0 S30DGF8A0 S30DGF8B0	200 200 400 400 600 600 800 800									8 10 8 10 12 15 12 15					T11	(8) (9) (10) (13)						
S30DF10A0 S30DF10B0 S30DF12A0 S30DF12B0 S30DF14A0 S30DF14B0 S30DF16A0 S30DF16B0	1000 1000 1200 1200 1400 1400 1600 1600									16 20 16 20 30 40 30 40							T12 B	(7) (9) (10) (13)				
S34DGF2A0 S34DGF2B0 S34DGF4A0 S34DGF4B0 S34DGF6A0 S34DGF6B0 S34DGF8A0 S34DGF8B0	200 200 400 400 600 600 800 800									8 10 8 10 12 15 12 15									T11	(8) (9) (10) (13)		
S34DF10A0 S34DF10B0 S34DF12A0 S34DF12B0 S34DF14A0 S34DF14B0 S34DF16A0 S34DF16B0	1000 1000 1200 1200 1400 1400 1600 1600									16 20 16 20 30 40 30 40											T12 B	(9) (10) (13)
ST063C02CCN ST063C02CCK ST063C04CCN ST063C04CCK ST063C06CCN ST063C06CCK ST063C06CCF ST063C08CCK ST063C08CCF ST063C10CCK ST063C10CCF ST063C12CCK ST063C12CCF	200 200 400 400 600 600 800 800 1000 1000 1200 1200									10 20 10 20 10 20 40 20 40 20 40 20 40												
ST073C06CFJ ST073C06CFF ST073C08CFJ ST073C08CFF ST073C10CFJ ST073C10CFF ST073C12CFJ ST073C12CFF	600 600 800 800 1000 1000 1200 1200	25 40 25 40 25 40 25 40	(7)																			
ST083C02CCN ST083C02CCK ST083C04CCN ST083C04CCK ST083C06CCN ST083C06CCK	200 200 400 400 600 600	10 20 10 20 10 20		(4) (7)																		

(1) 100% V_{RRM} reapplied $T_J = 125^\circ\text{C}$.(2) $T_J = 25^\circ\text{C}$.(3) $\pi \times I_{T(AV)}$ @ $T_J = 25^\circ\text{C}$.(4) $T_J = T_J = \text{Max. rated}$, reapplied $dv/dt = 20 \text{ V}/\mu\text{s}$.(5) $T_J = T_J = \text{Max. rated}$, reapplied $dv/dt = 200 \text{ V}/\mu\text{s}$.

(6) Available with metric stud; to specify change "P" to "M" at the end of part number: (ST333S08MFJ)

(7) Double side cooled.

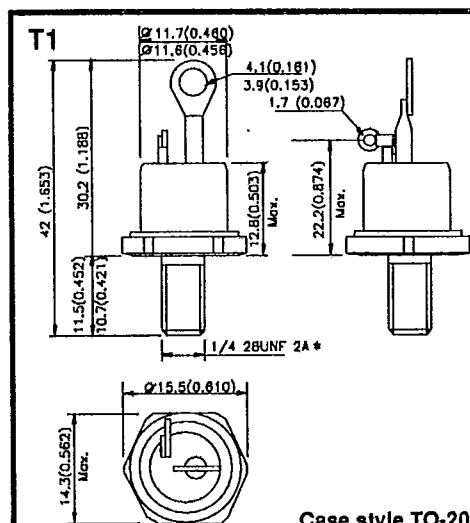
(8) Max. $T_J = 125^\circ\text{C}$ for standard types. High temperature types available with max. $T_J = 140^\circ\text{C}$ for $V_{RRM} \leq 1200\text{V}$. To specify insert "H" before voltage code: S30DGFH2B0.

(13) U.S. Standard.

Case outlines

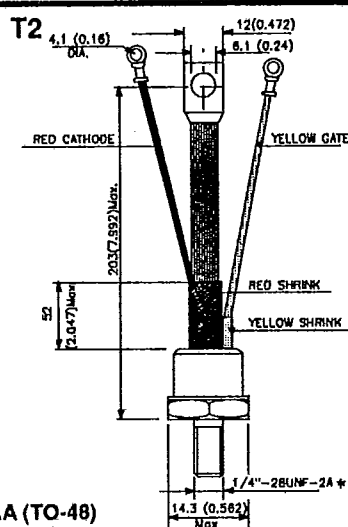
International
Rectifier

T-25-01



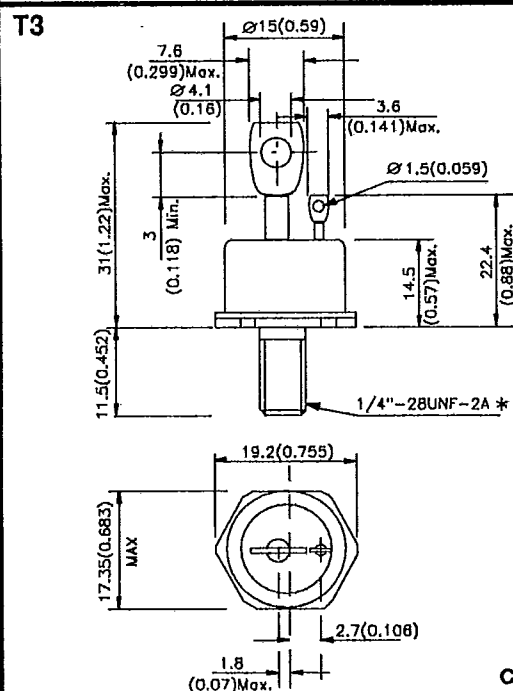
Case style TO-208AA (TO-48)

* FOR METRIC DEVICES: M6 x 1



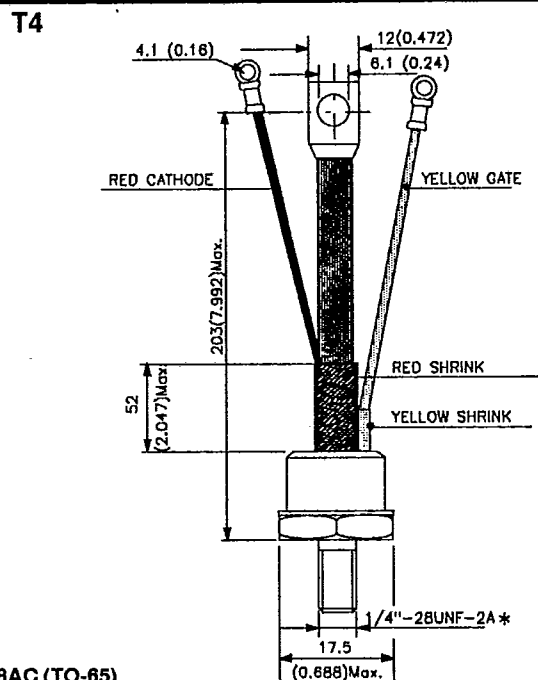
* FOR METRIC DEVICES: M6 x 1

All dimensions in millimetres (inches)
 Dimensions are nominal
 Full engineering drawings are
 available on request

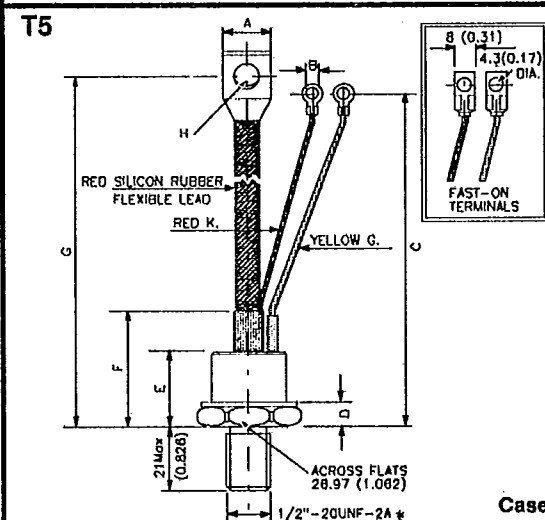


Case style TO-208AC (TO-65)

* FOR METRIC DEVICES: M6 x 1



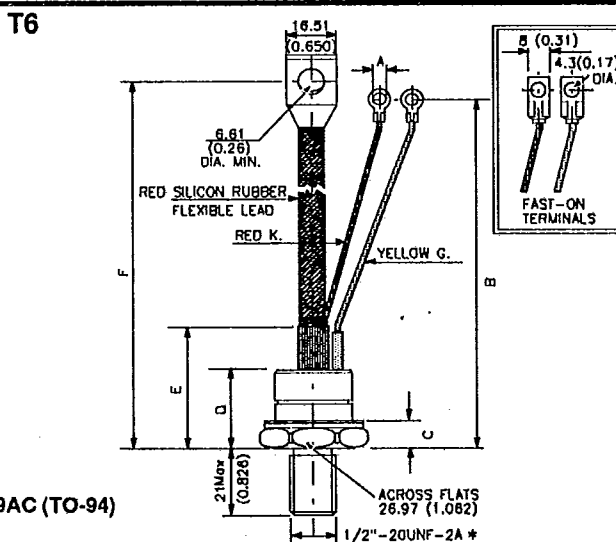
* FOR METRIC DEVICES: M6 x 1



Case style TO-209AC (TO-94)

* FOR METRIC DEVICE: M12 x 1.75 E 6

	A	B	C	D	E	F	G	H	
mm	15	7.6	173.99	8.9	20.5	58	160	8.3	T5 A
Inches	(0.59)	(0.299)	(6.850)	(0.350)	(0.807)	(2.283)	(6.299)	(0.326)	
mm	16.51	4.3	215	12.5	29	-	170	6.6	T5 B
Inches	(0.650)	(0.17)	(8.46)	(0.49)	(1.41)	-	(6.69)	(0.26)	



* FOR METRIC DEVICE: M12 x 1.75 E 6

	A	B	C	D	E	F	
mm	4.3	215	12.5	29	-	170	T6 A
Inches	(0.17)	(8.46)	(0.49)	(1.41)	-	(6.69)	

T7

45.97 (1.810)
A
21 (0.826) MAX
B
C
8.9
(0.350) MAX
27 (1.062)
ACROSS FLATS
1/2" 20 UNF 2A *
16.5
(0.649)
F

* FOR METRIC DEVICE: M12 x 1.75 E 6

	A	B	C	D	E	F	
mm	20.5	1.8	9.9	5.5	10	2.3	T7 A
Inches	(0.807)	(0.07)	(0.374)	(0.22)	(0.393)	(0.090)	
mm	20.4	1.85	9.77	5.29	10.16	2.92	T7 B
Inches	(0.805)	(0.065)	(0.385)	(0.208)	(0.400)	(0.115)	

Case style TO-208AD (TO-83)

T8

45.97 (1.810)
A
21 (0.826) MAX
B
C
8.9
(0.350) MAX
27 (1.062)
ACROSS FLATS
1/2" 20 UNF 2A *
16.5
(0.649)
F
2.92
(0.115)

* FOR METRIC DEVICE: M12 x 1.75 E 6

Case style TO-208AD (TO-83)

T9

RED SILICON RUBBER
FLEXIBLE LEAD
RED K.
YELLOW G.
31.75 (1.250)
ACROSS FLATS
3/4" 16 UNF 2A *

* FOR METRIC DEVICE: M16 x 1.5 E 6

	A	B	C	D	E	F	G	
mm	4.3	220	19	210	38.5	16	27.5	T9 A
Inches	(0.17)	(8.66)	(0.75)	(8.26)	(1.51)	(0.63)	(1.08)	
mm	3.56	196.21	19.17	186.64	31.75	12.70	27.82	T9 B
Inches	(0.140)	(7.725)	(0.755)	(7.35)	(1.250)	(0.500)	(1.095)	

Case style TO-209AB (TO-93)

T10

RED SILICON RUBBER
FLEXIBLE LEAD
RED K.
YELLOW G.
31.75 (1.250)
ACROSS FLATS
3/4" 16 UNF 2A *

* FOR METRIC DEVICE: M16 x 1.5 E 6

	A	B	C	D	E	F	G	
mm	4.3	220	19	210	38.5	16	27.5	T10 A
Inches	(0.17)	(8.66)	(0.75)	(8.26)	(1.51)	(0.63)	(1.08)	
mm	3.56	196.21	19.17	186.64	34.29	12.70	27.82	T10 B
Inches	(0.140)	(7.725)	(0.755)	(7.35)	(1.350)	(0.500)	(1.095)	

Case style TO-209AB (TO-93)

T11

25.34 (0.998)
3.56 (0.140)
9.94 (0.391)
RED SILICON RUBBER
RED K.
YELLOW G.
SHRINK RED
244.86 (9.64)
243.55 (9.59)
12.70 (0.500)
38.10 (1.500)
27.82 (1.095)
42.87 (1.688)
ACROSS FLATS
3/4" 16 UNF 2A

* FOR METRIC DEVICE: M16 x 1.5 E 6

Case style TO-209AE (TO-118)

T12

RED SILICON RUBBER
RED K.
YELLOW G.
SHRINK RED
244.86 (9.64)
12.70 (0.500)
38.10 (1.500)
27.82 (1.095)
42.87 (1.688)
ACROSS FLATS
3/4" 16 UNF 2A

* FOR METRIC DEVICE: M16 x 1.5 E 6

Case style TO-209AE (TO-118)

All dimensions in millimetres (Inches)
Dimensions are nominal

	A	B	C	D	E	F	G	H	
mm	4.3	22	10.5	245	47	21	27.5	45	T12 A
Inches	(0.17)	(0.866)	(0.41)	(9.64)	(1.85)	(0.82)	(1.08)	(1.77)	

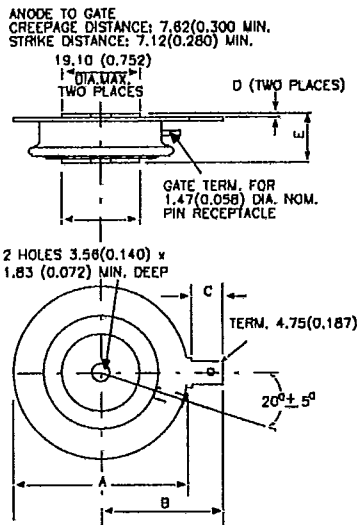
Case outlines

INTERNATIONAL RECTIFIER

International
IR Rectifier

T-25-01

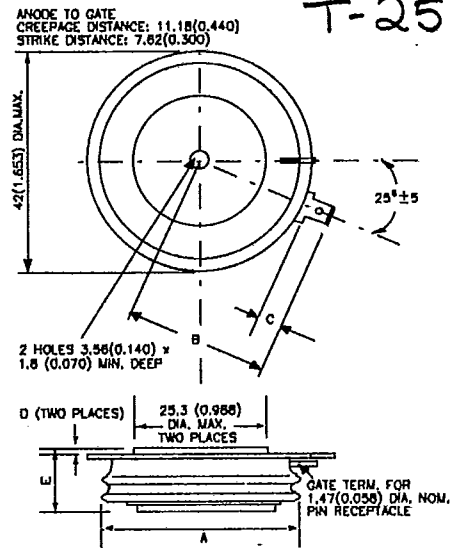
T13



	A	B	C	D	E	
mm	42	28.1	6.5	0.3	13.1/14.4	T13 A
inches	1.65	1.10	0.25	0.012	0.516/0.567	
mm	41.5	28.32	6.10	0.77	13.65/14.35	T13 B
inches	1.63	1.115	0.240	0.030	0.537/0.565	

Case style TO-200AB (A-PUK)

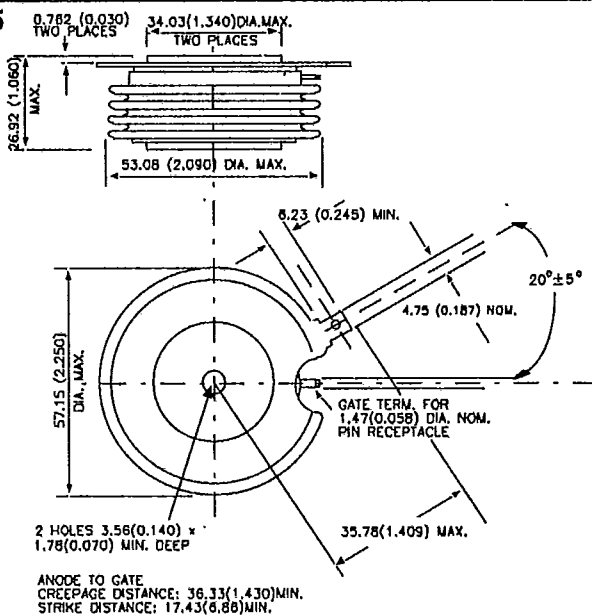
T14



	A	B	C	D	E	
mm	40.1	28.1	6.5	0.3	14.15/15.1	T14 A
inches	1.57	1.10	0.25	0.012	0.557/0.594	
mm	40.25	28.44	6.23	0.77	14.30/15.10	T14 B
inches	1.585	1.120	0.245	0.030	0.563/0.594	

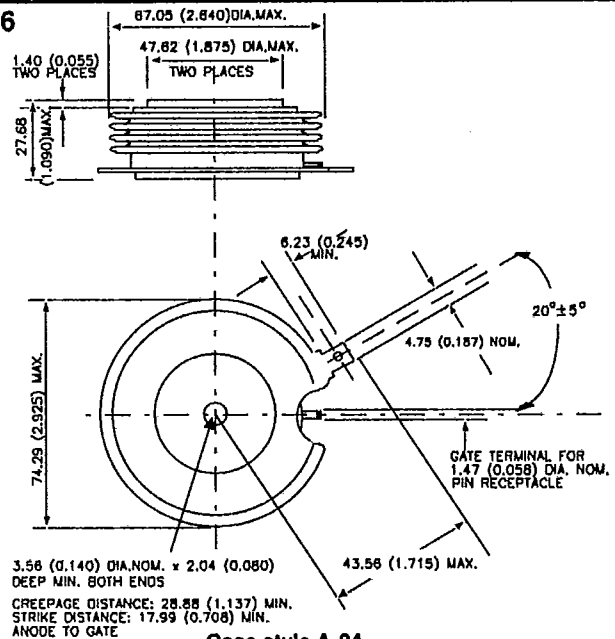
Case style TO-200AB (E-PUK)

T15



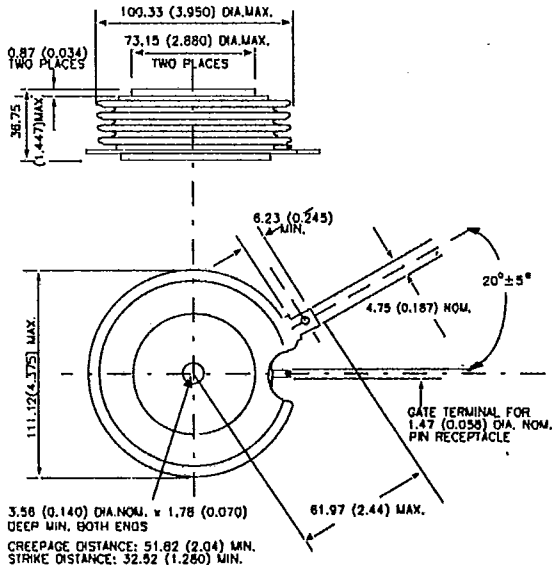
Case style TO-200AC

T16



Case style A-24

T17



- All dimensions in millimetres (inches)
- Dimensions are nominal
- Full engineering drawings are available on request