

**Fast Recovery Rectifiers**

$I_{F(AV)}$ 50% Duty Cycle, Half Sine 1KHz (Amps)	$I_{FSM}$ (Amps $\times 10^3$ ) 50 Hz 60 Hz		$I^2t$ for Fusing @ 8.3 ms ( $A^2sec \times 10^4$ )	$I_{RRM}$ @ $V_{RRM}$ and $T_J(Max)$ (mA)	$V_{RRM}$ Range (Volts)	$V_{FM}$ @ $T_J=25^\circ C$ $I_{FM}$ $V_{FM}$ (Amps) (Volts)		Chip Size (mm)	Junction Temp. Range ( $^\circ C$ )	$R_{\theta JC}$ ( $^\circ C/W$ )	$R_{\theta CS}$ Lubricated ( $^\circ C/W$ )
250 $T_c=82^\circ C$	4.09	4.5	8.5	50	400-1400	800	2	23	-40 to 150	.17	.10
250 $T_c=73^\circ C$	3.35	3.5	5.1	25	100-1500	1000	3	22	-40 to 125	.095	.025
300 $T_c=74^\circ C$	3.35	3.5	5.1	50	400-1200	800	2.75	23	-40 to 150	.095	.025
300 $T_c=74^\circ C$	5.45	6	15	50	400-1400	800	1.5	23	-40 to 150	.17	.10
300 $T_c=74^\circ C$	5.45	6	15	50	400-1400	800	1.5	23	-40 to 150	.17	.10
400 $T_c=74^\circ C$	4.09	4.5	8.5	50	400-1400	800	2	23	-40 to 150	.095	.025
400 $T_c=78^\circ C$	4.54	5	10	25	100-1500	1000	2	22	-40 to 125	.095	.025
400 $T_c=113^\circ C$	6.36	7	21	25	100-1500	3000	2.8	22	-40 to 175	.095	.025
475 $T_c=90^\circ C$	6.73	7.4	22	50	1600-2600	1500	2.6	30	-40 to 150	.06	.02
500† $T_c=86^\circ C$	7.3	8	27	80	4500	1570	3.5	33	-40 to 125	.025	—
500† $T_c=61^\circ C$	7.3	8	27	50	2500-2800	1570	3	33	-40 to 125	.045	—
500 $T_c=92^\circ C$	6	6.5	17.6	50	400-2500	1500	2.25	33	-40 to 150	.055	.02
550 $T_c=72^\circ C$	5.45	6	15	50	400-1400	800	1.5	23	-40 to 150	.095	.025
600 $T_c=65^\circ C$	9.1	10	41.7	50	500-1500	3000	2.2	30	-40 to 125	.06	.02
650 $T_c=78^\circ C$	6.8	7.5	23.4	50	400-1400	1500	2.05	33	-40 to 150	.055	.02
700 $T_c=53^\circ C$	9.1	10	41.7	50	100-1500	3000	2.2	30	-40 to 125	.045	.02
700 $T_c=84^\circ C$	8.7	9.5	37.6	50	400-2500	1500	1.65	33	-40 to 150	.055	.02
700 $T_c=94^\circ C$	6	6.5	17.6	50	400-2500	1500	2.25	33	-40 to 150	.035	.02
800 $T_c=68^\circ C$	10	11	50.4	50	400-1400	1500	1.65	33	-40 to 150	.055	.02
800 $T_c=98^\circ C$	8.7	9.5	37.6	50	400-2500	1500	1.65	33	-40 to 150	.035	.02
860 $T_c=50^\circ C$	13	14.6	88.8	50	1600-2600	3000	3	40	-40 to 150	.04	.02
900 $T_c=73^\circ C$	6.8	7.5	23.4	50	400-1400	1500	2.05	33	-40 to 150	.035	.02

Note 1 = Available in Smaller Version of DO-200AB

\* = Frequency Not Specified

° = Tentative Specifications

† = Single Phase 60 Hz

R = Reverse Polarity

Typical Reverse Recovery Time @ T <sub>J</sub> =25°C			PACKAGE INFORMATION			
I <sub>FM</sub> (Amps)	di/dt (A/μsec)	t <sub>rr</sub> (μsec)	Max Mounting Force or Torque	STYLE	Outline	TYPE NO.
785	25	1	360 lb-in 417 kg-cm	¼-16 Stud	DO-9	R603__25 <sup>R</sup>
500	500	1.2	800 lbs 3.56 KN	Press Pak	DO-200AA	A399
785	25	.5	1400 lbs 6.25 KN	Press Pak	R62	R622__30
785	25	2	360 lb-in 417 kg-cm	¼-16 Stud	DO-9	R602__35
785	25	2	360 lb-in 417 kg-cm	¼-16 Stud	DO-9	R603__35 <sup>R</sup>
785	25	1	1400 lbs 6.25 KN	Press Pak	R62	R622__40
1000	25	1.7	800 lbs 3.56 KN	Press Pak	DO-200AA	A397
1260	25	2	800 lbs 3.56 KN	Press Pak	DO-200AA	A398
2000	25	5	2000 lbs 8.9 KN	Press Pak	DO-200AB	A432
500	30	10	5300 lbs 23.6 KN	Press Pak	21 x 92 mm	°FD500GV*
500	30	5.5	3300 lbs 14.7 KN	Press Pak	16 x 85 mm	°FD500GH*
1500	25	2	2400 lbs 10.7 KN	Press Pak	R72	R722__05
785	25	2	1400 lbs 6.25 KN	Press Pak	R62	R622__55
1000	25	3.5	2000 lbs 8.9 KN	Press Pak	DO-200AB	A437
1500	25	1	2400 lbs 10.7 KN	Press Pak	R72	R722__06
1000	25	3.5	2000 lbs 8.9 KN	Press Pak	DO-200AA	A337
1500	25	3	2400 lbs 10.7 KN	Press Pak	R72	R722__07
1500	25	2	2400 lbs 10.7 KN	Press Pak	R7S	R7S2__07
1500	25	2	2400 lbs 10.7 KN	Press Pak	R72	R722__08
1500	25	3	2400 lbs 10.7 KN	Press Pak	R7S	R7S2__08
1000	50	5	3500 lbs 15.6 KN	Press Pak	DO-200AB	A442
1500	25	1	2400 lbs 10.7 KN	Press Pak	R7S	R7S2__09

JEDEC DO-15



R62



R72



R7S



JEDEC DO-200AA

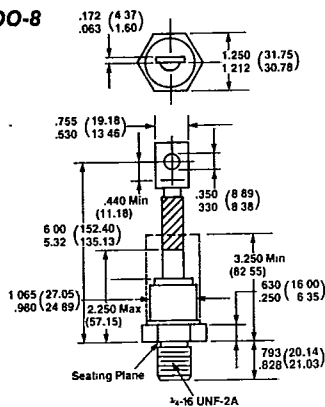


JEDEC DO-200AB/DO-200AC

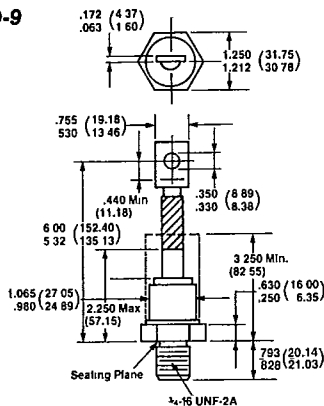


# Fast Recovery Rectifiers Outline Drawings

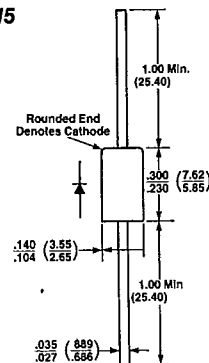
**JEDEC DO-8**



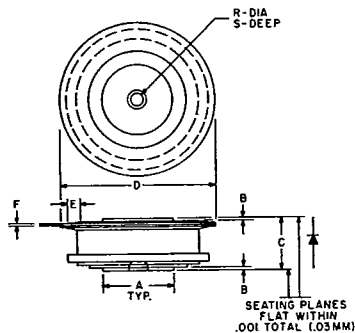
**JEDEC DO-9**



**JEDEC DO-15**

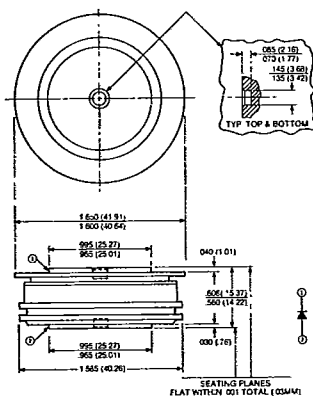


**JEDEC DO-200AA (Type 1) (A397, A398, A399)**



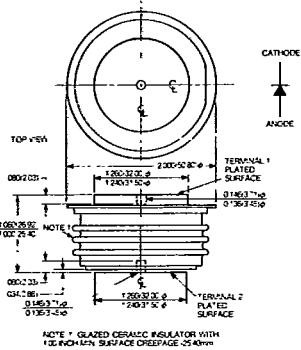
Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	.744	.752	18.89	19.10
B	.030	.060	.76	1.52
C	.515	.565	13.08	14.35
D	1.600	1.656	40.64	41.9
E	.110	—	2.79	—
F	.031	.017	.33	.43
R	.135	.145	3.42	3.68
S	.067	.083	1.70	2.1

**JEDEC DO-200AA (Type 2) (A337)**



Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	.985	.995	25.01	25.27
B	.135	.145	3.42	3.68
C	.560	.605	14.22	15.37
D <sub>1</sub>	.040	—	1.01	—
D <sub>2</sub>	.030	—	.76	—
E	1.600	1.650	40.64	41.91
F	.070	.085	1.77	2.16
G	—	1.585	—	40.26

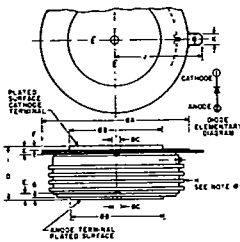
**JEDEC DO-200AB**



Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	—	2.960	—	75.18
B	1.800	1.900	45.78	49.26
C	0.136	0.146	3.45	3.71
D	1.000	1.070	25.10	27.18
E	.070	.100	1.78	2.54
F	.030	—	0.76	—
G	.003	.067	0.13	1.70
H	—	—	—	—
J	1.630	1.710	42.67	43.43
K	.186	.189	4.72	4.80

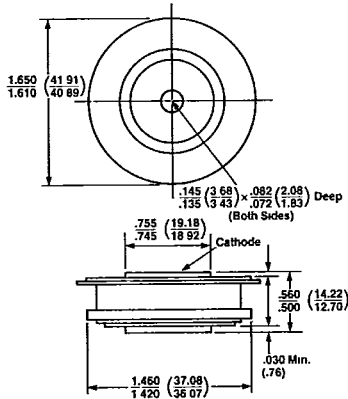
Note: Glazed ceramic insulator with 1.00-inch (25.40mm) surface creepage, minimum.

**JEDEC DO-200AC**

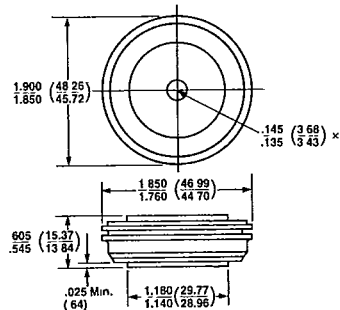


Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	1.333	1.343	33.86	34.11
B	.135	.145	3.42	3.68
C	1.018	1.065	25.85	27.05
D	.030	.110	.76	—
E	2.240	2.330	56.89	58.42
F	.070	.090	3.55	4.06

**R62**

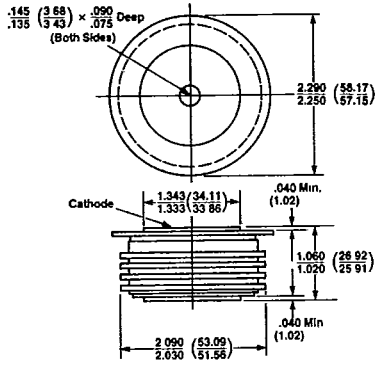


**R7S**

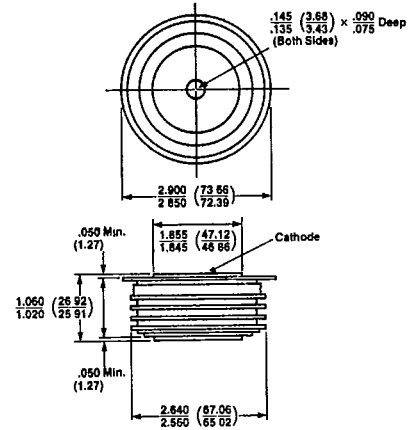


# Fast Recovery Rectifiers Outline Drawings

**R72**



**R9G**



**Press Pak—Consult Factory**  
 14.5mm × 43mm  
 16mm × 85mm  
 21mm × 92mm

**Metric Stud—Consult Factory**  
 M12 × 1.5  
 M20 × 1.5