

STANDARD RECOVERY DIODES**Stud Version****Features**

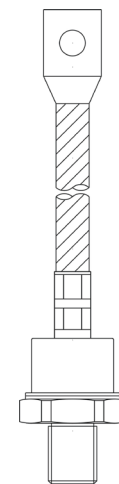
- Alloy diode
- High voltage ratings up to 1800V
- High surge current capabilities
- Capacity of supporting high surge current
- Threaded studs 3/4 - 16UNF2A or M20x1.5
- Stud cathode and stud anode version

400A**Typical Applications**

- AC/DC converters
- DC power supplies
- Machine tool controls

Major Ratings and Characteristics

Parameters	400U(R)..	Units
$I_{F(AV)}$	400	A
	@ T_c	1008 °C
I_{FSM}	@ 50Hz	5400 A
	@ 60Hz	5630 A
$I^2 t$	@ 50Hz	250 KA ² s
	@ 60Hz	232 KA ² s
V_{RRM}	400 to 2000	V
T_J range	- 40 to 150	°C



case style
DO-205AB (DO-9)

ELECTRICAL SPECIFICATIONS
Voltage Ratings

Type number	Voltage Code	V _{RRM} , maximum repetitive peak reverse voltage V	V _{RSM} , maximum non-repetitive peak rev. voltage V	I _{RRM} max. @ T _J = T _J max. mA
400U(R)..	04	400	500	20
	08	800	900	
	12	1200	1300	
	14	1400	1500	
	16	1600	1700	
	18	1800	1900	
	20	2000	2100	

Forward Conduction

Parameter	300U..	Units	Conditions		
I _{F(AV)} Max. average forward current @ Case temperature	400	A	180° conduction, half sine wave		
	75	°C			
I _{FSM} , Maximum peak, one-cycle forward, non-repetitive surge current	5400	A	t = 10ms	No voltage reappplied	Sinusoidal half wave, Initial T = T max.
	5630		t = 8.3ms		
	4100		t = 10ms	100% V _{RRM} reappplied	
	4200		t = 8.3ms		
I ² t Maximum I ² t for fusing	250	KA ² s	t = 10ms	No voltage reappplied	
	232		t = 8.3ms		
	105		t = 10ms	100% V _{RRM} reappplied	
	100		t = 8.3ms		
I ² √t Maximum I ² √t for fusing	2300	KA ² √s	t = 0.1 to 10ms, no voltage reappplied		
V _{FM} Maximum on-state or forward	1.80	V	pk = 900A, T _J = 25°C, t _p = 10ms sine pulse		

Thermal and Mechanical Specifications

Parameter	300U(R)..	Units	Conditions
T _J	- 40 to 150	°C	
R _{thJC} Thermal Impedance, max.	0.2	K/W	Junction to case
T Max. allowed mounting torque +0 -20%	37	Nm	Not lubricated threads
	28		Lubricated threads
wt Approximate weight	290	g	
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Outline Table