



STANDARD RECOVERY DIODE STUD TYPES 300A

Features

High Surge Capability
Types Up to 1600V V_{RRM}

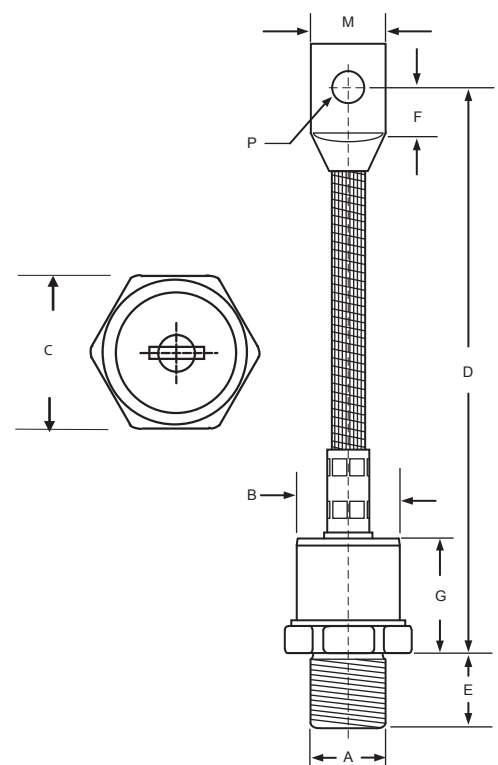
**300Amp Rectifier
100~1600 Volts**

Maximum Ratings

Operating Temperature: -55 °C to +175 °C
Storage Temperature: -55 °C to +175 °C

DO-9 (DO-205AB)

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S300BM(R)	100V	70V	100V
S300DM(R)	200V	140V	200V
S300EM(R)	300V	212V	300V
S300GM(R)	400V	280V	400V
S300JM(R)	600V	420V	600V
S300KM(R)	800V	565V	800V
S300MM(R)	1000V	707V	1000V
S300QM(R)	1200V	848V	1200V
S300YM(R)	1600V	1131V	1600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	300 A	$T_C=130^{\circ}C$
Maximum Peak Forward Surge Current	I_{FSM}	6850A	8.3ms , half sine
Maximum Instantaneous Forward Voltage *	V_F	1.1V	$I_{FM} = 300A,$ $T_J = 25^{\circ}C'$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage	I_R	25 μA 12mA	$T_J=25^{\circ}C$ $T_J=175^{\circ}C$
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.28 °C/W	
Mounting torque (+0 -10%)	Inch pounds (in-lb)	270	

*Pulse Test: Pulse Width 300 μ sec. Duty Cycle < 2%

Marking Notes :

- 1.Suffix with "R" = Stud Reverse Polarity : Anode to stud
- 2.None = Stud normal polarity : Cathode to stud

DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	M 20 * P 1.5			
B	-----	1.100	-----	27.94
C	1.240	1.250	31.50	31.90
D	5.310	5.980	135	152
E	0.780	0.828	19.60	21.03
F	0.470	0.530	11.94	13.46
G	-----	1.122	-----	28.50
M	-----	0.787	-----	20.00
P	0.330	0.350	8.38	8.89



Figure.1 - Typical Forward Characteristics

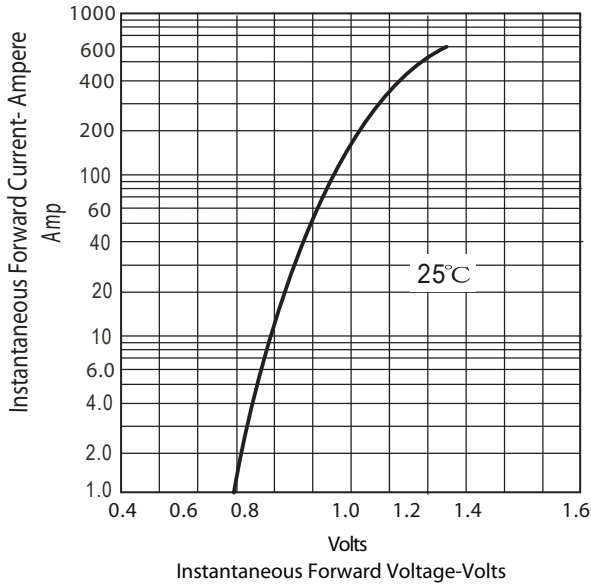


Figure.2 - Forward Derating Curve

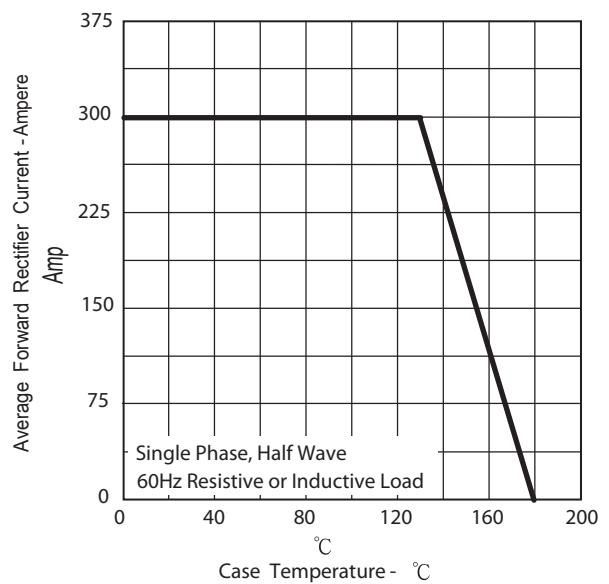


Figure.3 - Peak Forward Surge Current

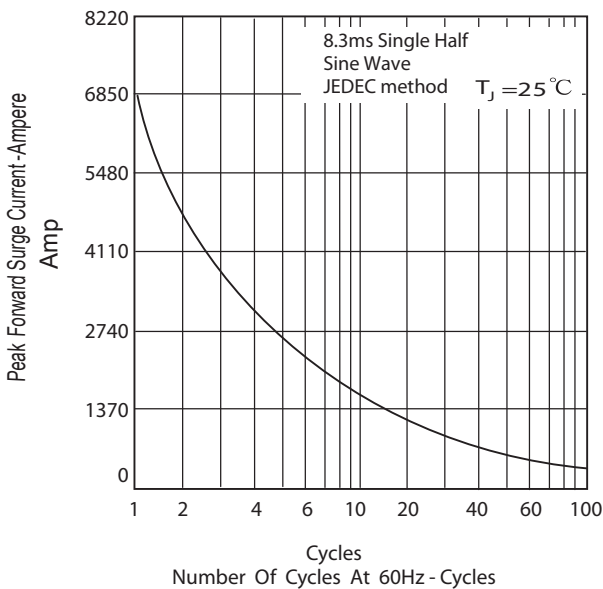


Figure.4 - Typical Reverse Characteristics

