



STANDARD RECOVERY DIODE STUD TYPES 300A

Features

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

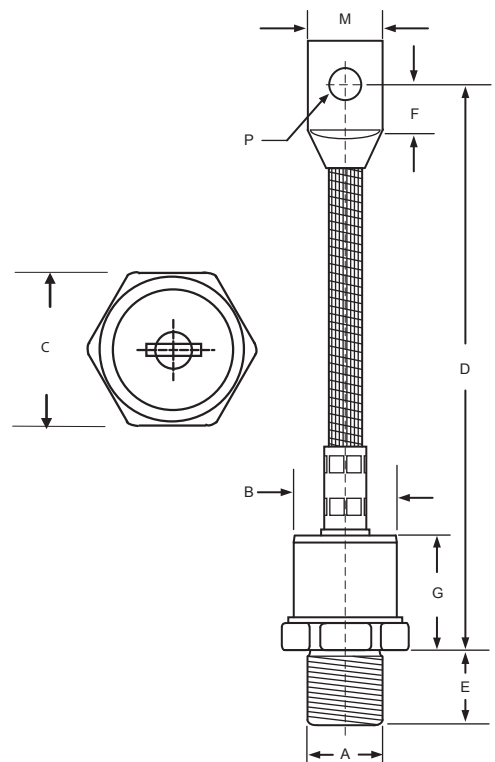
**300Amp Rectifier
100~1600 Volts**

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
TCS300GM(R)	400V	280V	400V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

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

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

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



Figure.1 - Typical Forward Characteristics

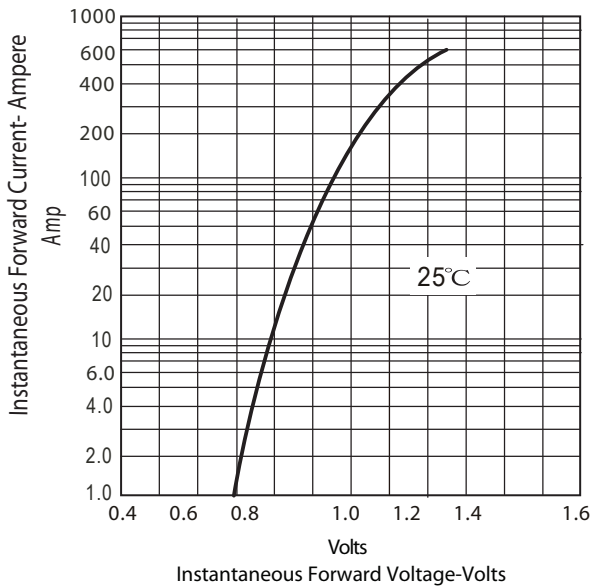


Figure.2 - Forward Derating Curve

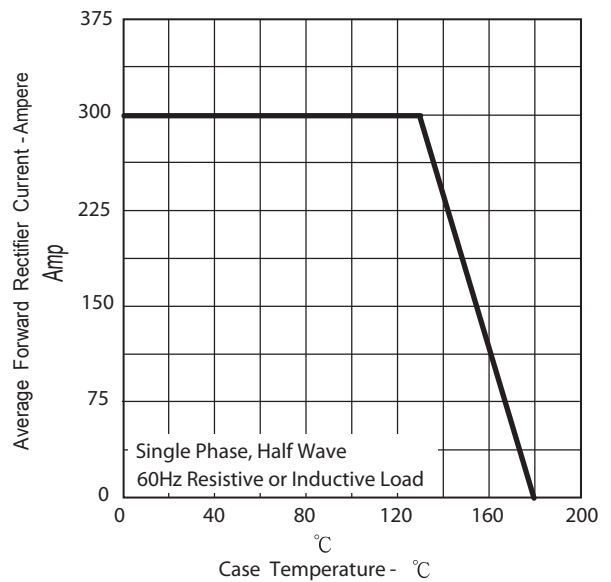


Figure.3 - Peak Forward Surge Current

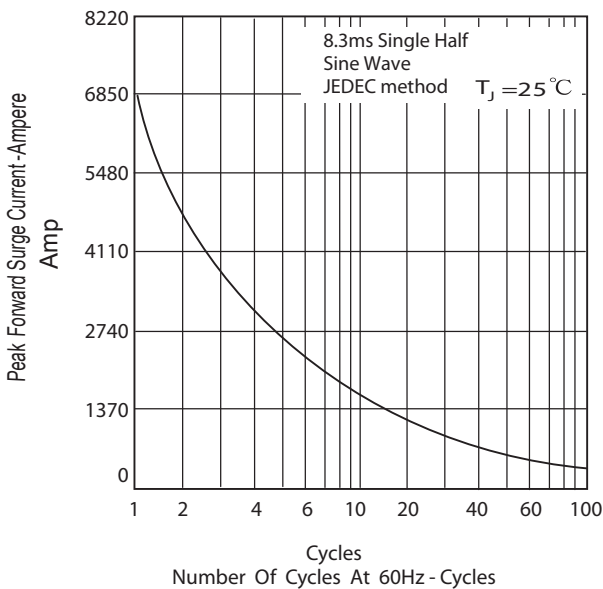


Figure.4 - Typical Reverse Characteristics

