Micro Commercial Components
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S70A THRU S70M

70 Amp Rectifier 50 to 1000 Volts

Features

- High Surge Capability
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

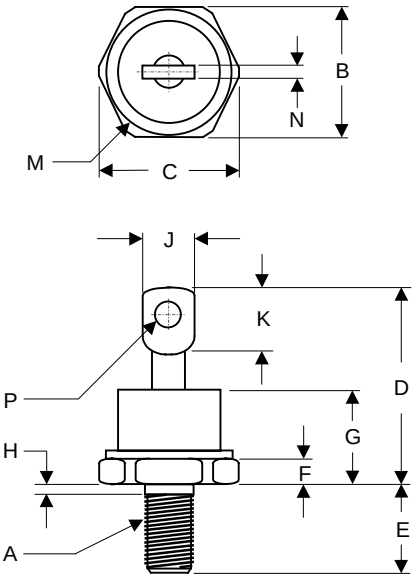
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S70A	50V	35V	50V
S70B	100V	70V	100V
S70D	200V	40V	200V
S70G	400V	280V	400V
S70J	600V	420V	600V
S70K	800V	560V	800V
S70M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	70 A	T_L = 140°C
Peak Forward Surge Current	I_{FSM}	1000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.35V	I_{FM} = 70.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25µA 150µA	T_A = 25°C T_A = 55°C
Typical Junction Capacitance	C_J	240pF	Measured at 1.0MHz, V_R=4.0V

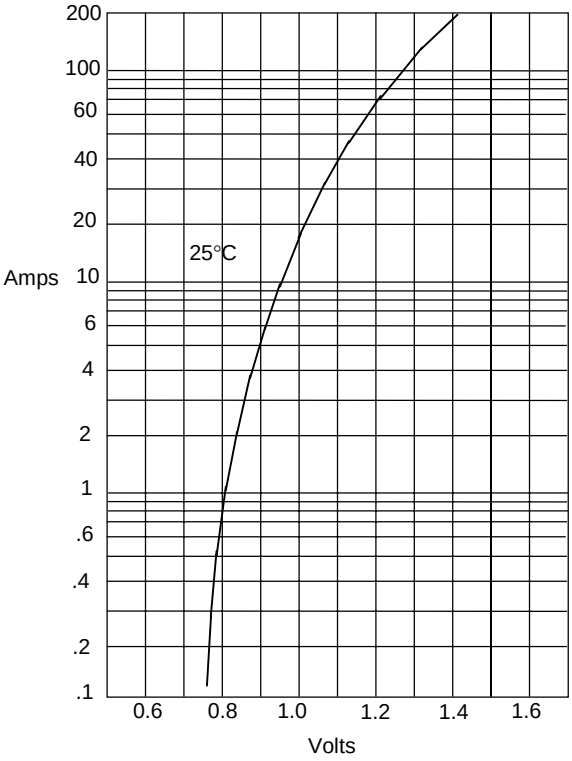
*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

DO-5



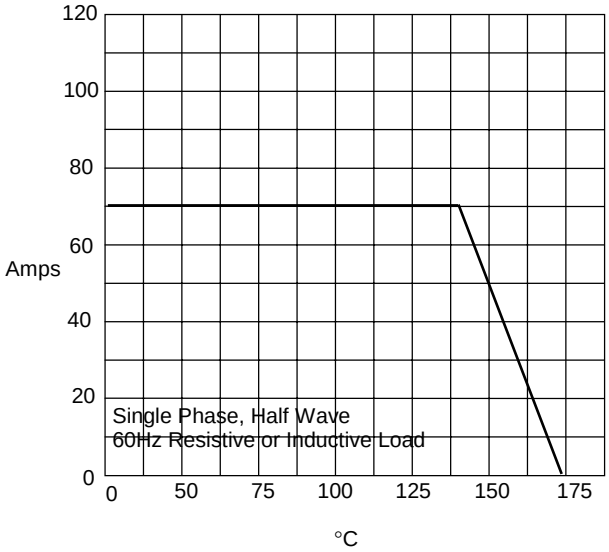
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	¼-28	Threads	Standard	Polarity	
B	.669	.687	17.19	17.44	
C	-----	.794	-----	20.16	
D	-----	1.000	-----	25.40	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	-----	.450	-----	11.43	
H	.220	.249	5.58	6.32	
J	-----	.375	-----	9.52	
K	.156	-----	3.96	-----	
M	-----	.667	-----	16.94	∅
N	-----	.080	-----	2.03	
P	.140	.175	3.56	4.45	∅

Figure 1
Typical Forward Characteristics



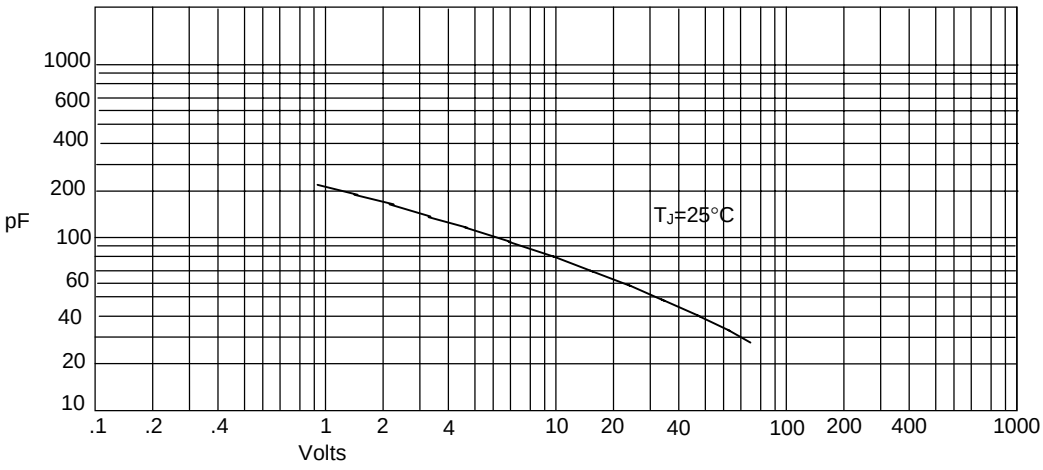
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



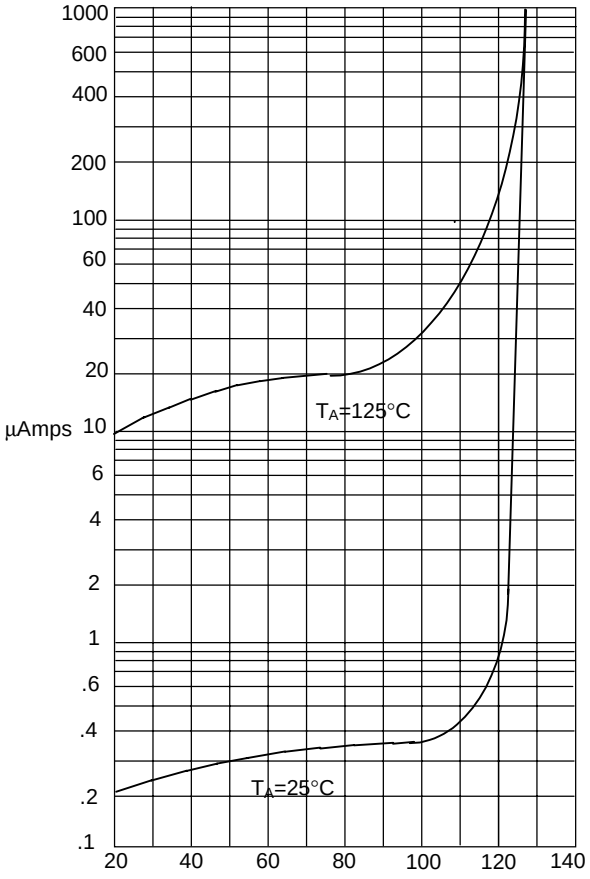
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



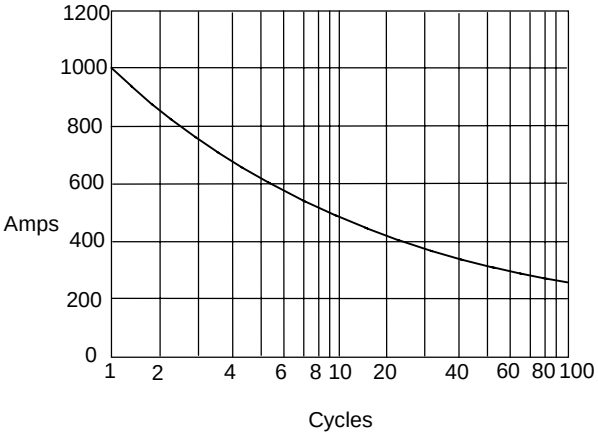
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles