Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

S5AL
THRU
S5ML

5 Amp
Silicon Rectifier
50 to 1000 Volts

Features

- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Current Capability
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

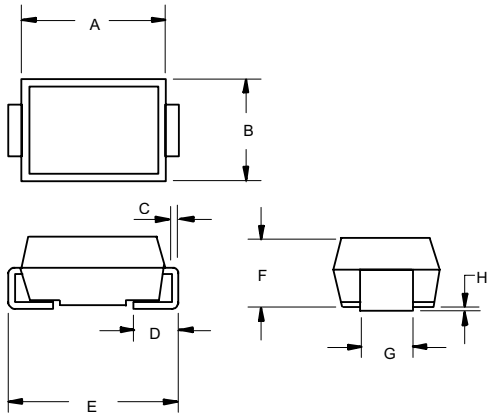
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S5AL	S5A	50V	35V	50V
S5BL	S5B	100V	70V	100V
S5DL	S5D	200V	140V	200V
S5GL	S5G	400V	280V	400V
S5JL	S5J	600V	420V	600V
S5KL	S5K	800V	560V	800V
S5ML	S5M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	T_a = 75°C
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.20V	I_{FM} = 5.0A; T_a = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	80µA 1mA	T_a = 25°C T_a = 100°C
Typical Junction Capacitance	C_J	100pF	Measured at 1.0MHz, V_R=4.0V

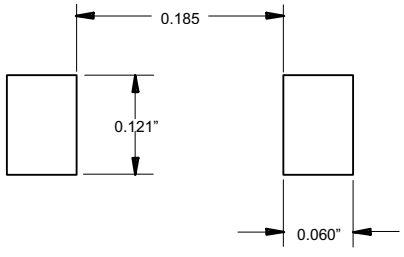
*Pulse test: Pulse width 200 µsec, Duty cycle 2%

DO-214AB
(SMCJ) (LEAD FRAME)



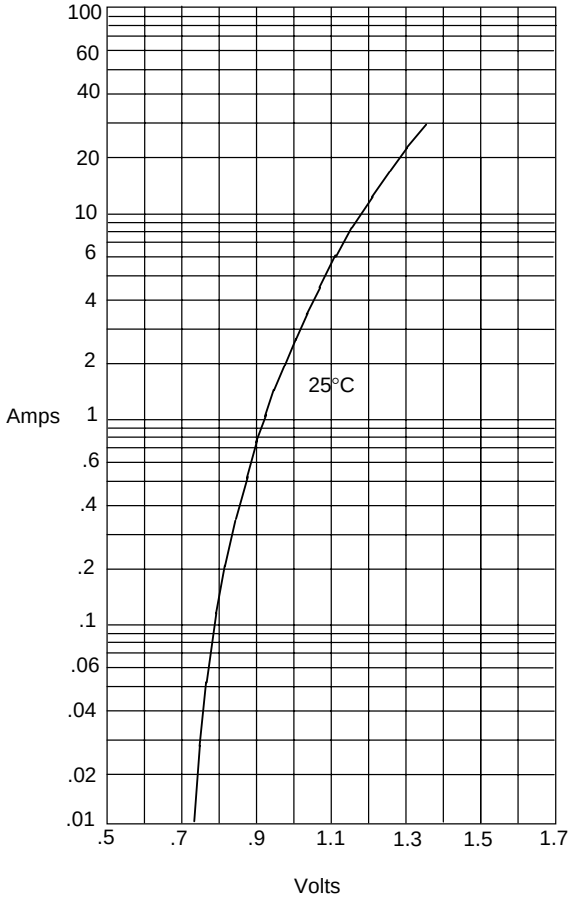
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.260	.280	6.60	7.11	
B	.220	.245	5.59	6.22	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.305	.320	7.75	8.13	
F	.079	.103	2.00	2.62	
G	.108	.128	2.75	3.25	
H	.002	.008	0.050	0.203	

SUGGESTED SOLDER PAD LAYOUT



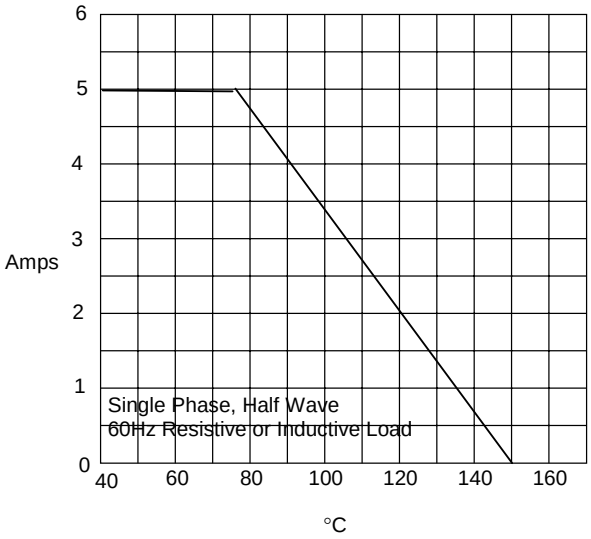
Micro Commercial Components

Figure 1
Typical Forward Characteristics



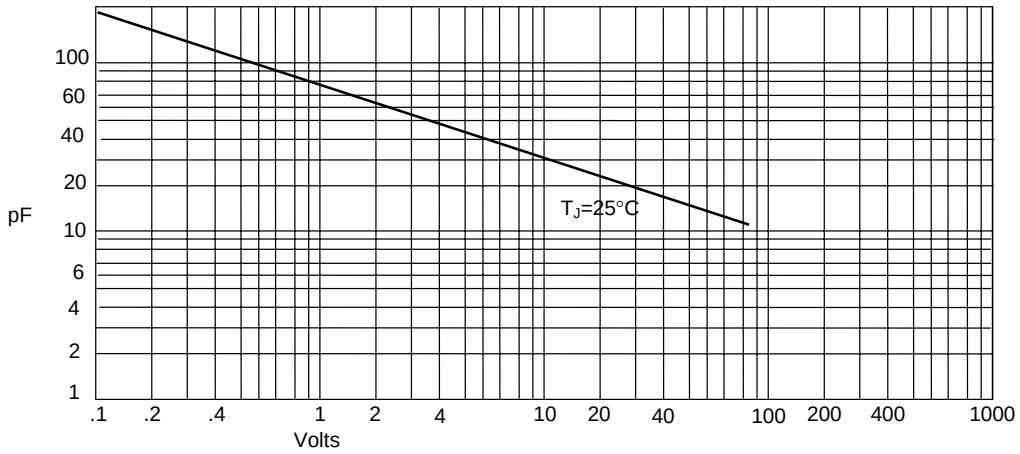
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

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

Micro Commercial Components

IMPORTANT NOTICE
Micro Commercial Components Corp . reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . *Micro Commercial Components Corp* . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp* . and all the companies whose products are represented on our website, harmless against all damages.
APPLICATIONS DISCLAIMER
Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical, Aerospace or Military Applications.