



Micro Commercial Components



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

# S1Q THRU S1ZZ

## 1 Amp Silicon Rectifier 1200 to 2000 Volts

### Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Perfect For Ballast, Television And Monitor Applications

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S1Q	S1Q	1200V	840V	1200V
S1V	S1V	1400V	980V	1400V
S1Y	S1Y	1600V	1120V	1600V
S1Z	S1Z	1800V	1260V	1800V
S1ZZ	S1ZZ	2000V	1400V	2000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.10V	$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10.0 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{rr}$	2.5 $\mu\text{s}$	$I_F=0.5A, I_R=1.0A,$ $I_{r1}=0.25A$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

DO-214AA  
(SMBJ) (Round Lead)

Cathode Band

DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.075	.089	1.90	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.90	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

SUGGESTED SOLDER PAD LAYOUT



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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