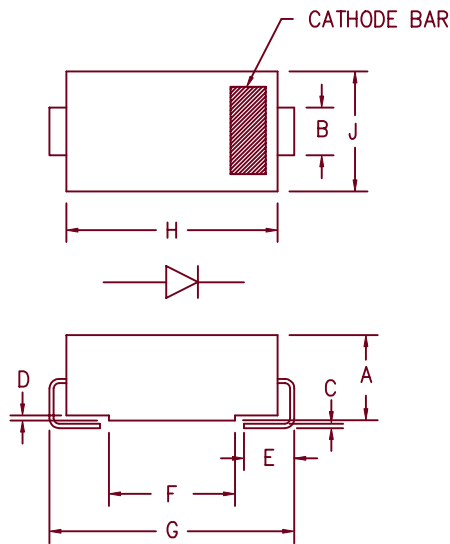


Ultra Fast Recovery Rectifiers ES1J — ES1K



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.078	.115	1.98	2.92	
B	.068	.087	1.73	2.21	
C	----	.005	----	0.13	
D	----	.020	----	0.51	
E	.030	.060	0.76	1.52	
F	.065	.084	1.65	2.13	
G	.194	.228	4.93	5.79	
H	.157	.177	3.99	4.50	
J	.100	.110	2.57	2.79	

SMA (DO-214AC)

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
ES1J	600V	600V
ES1K	800V	800V

- Ultra Fast Recovery
- 150°C Junction Temperature
- VRRM 600 to 800 Volts
- 1 Amp Current Rating
- t_{RR} 60nS Max.

Electrical Characteristics

Average forward current	I _{F(AV)} 1.0 Amps	T _L = 75°C, Square wave
Maximum surge current	I _{FSM} 30 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .89 Volts	I _{FM} = 0.1A: T _J = 25°C*
Max peak forward voltage	V _{FM} 1.35 Volts	I _{FM} = 1.0A: T _J = 25°C*
Max reverse recovery time	t _{RR} 60 nS	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current	I _{RM} 5 μA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 45 pF	V _R = 4V, J = 25 °C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T _{STG}	-55°C to 150°C
Operating junction temp range	T _J	-55°C to 150°C
Weight		.0047 ounces (.013 grams) typical

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