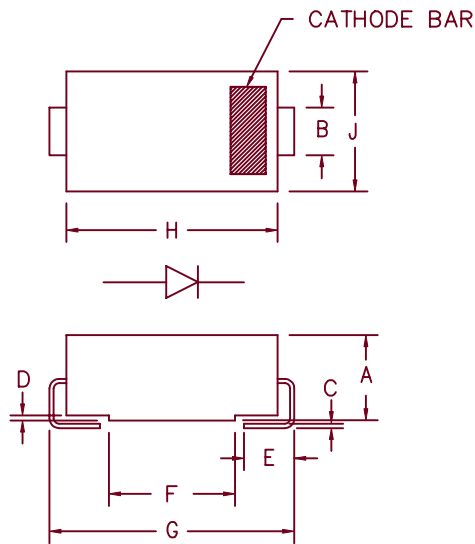


Ultra Fast Recovery Rectifiers ES1A — ES1D



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

ES1A
ES1B
ES1D

Working
Peak Reverse
Voltage

50V
100V
200V

Repetitive
Peak Reverse
Voltage

50V
100V
200V

- Ultra Fast Recovery
- 150°C Junction Temperature
- VRRM 50 to 200 Volts
- 1 Amp Current Rating
- t_{RR} 50ns Max.

Electrical Characteristics

Average forward current
Maximum surge current
Max peak forward voltage
Max peak forward voltage
Max reverse recovery time
Max peak reverse current
Typical junction capacitance

$I_{F(AV)}$ 1.0 Amps
 I_{FSM} 30 Amps
 V_{FM} .75 Volts
 V_{FM} .975 Volts
 t_{RR} 50 ns
 I_{RM} 5 μ A
 C_J 45 pF

$T_L = 75^\circ\text{C}$, Square wave
8.3ms, half sine, $T_J = 175^\circ\text{C}$
 $I_{FM} = 0.1\text{A}; T_J = 25^\circ\text{C}^*$
 $I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
 $V_{RRM}, T_J = 25^\circ\text{C}$
 $V_R = 4\text{V}, T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Thermal Characteristics

Storage temperature range
Operating junction temp range
Weight

T_{STG}
 T_J

-55°C to 150°C
-55°C to 150°C
.0047 ounces (.013 grams) typical

4-4-03 Rev. 1