
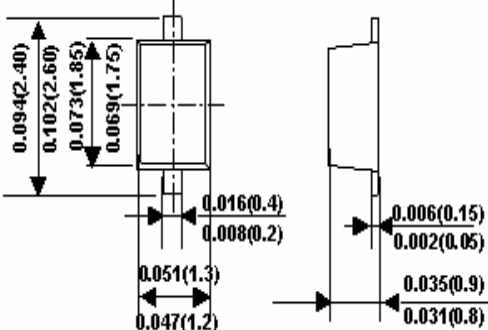
	<h2 style="margin: 0;">AES1A THRU AES1J</h2> <h3 style="margin: 0;">175mA. Super Fast Surface Mount Rectifiers</h3>									
	Voltage Range 50 to 600 Volts Current 175 mAmpere									
<h4>Features</h4> <ul style="list-style-type: none"> ✧ Glass passivated junction chip ✧ For surface mounted application ✧ Low profile package ✧ Built-in strain relief, ✧ Ideal for automated placement ✧ Easy pick and place ✧ Superfast recovery time for high efficiency ✧ Glass passivated chip junction ✧ High temperature soldering: 260°C/10 seconds at terminals ✧ Plastic material used carries Underwriters Laboratory Classification 94V-O 	<h4>SOD-323F</h4>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>									
<h4>Mechanical Data</h4> <ul style="list-style-type: none"> ✧ Cases: Molded plastic ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packing: tape per E1A STD RS-481 ✧ Weight: 0.01 gram 										
<h4>Maximum Ratings and Electrical Characteristics</h4> Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%										
Type Number	Symbol	AES 1A	AES 1B	AES 1C	AES 1D	AES 1F	AES 1G	AES 1H	AES 1J	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Marking Code		EA	EB	EC	ED	EF	EG	EH	EJ	
Maximum Average Forward Rectified Current @85°C @ 25°C	$I_{(AV)}$ $I_{(PEAK)}$	175 625								mA
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	20								A
Maximum Instantaneous Forward Voltage $I_F=175mA$ @ 85°C @ 25°C		1.25 1.45								V
Maximum DC Reverse Current @ $T_A=25°C$ at Rated DC Blocking Voltage	I_R	0.1								uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50								nS
Typical Junction Capacitance (Note 2)	C_j	5								pF
Maximum Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	85 35								°C/W
Operating Temperature Range	T_J	-40 to +85								°C
Storage Temperature Range	T_{STG}	-40 to + 85								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 2. Measured at 1 MHz and Applied $V_R=4.0$ Volts
 3. P.C.B. Mounted on 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Area.