

## SA154 THRU SA160 DO-213AB

### SURFACE MOUNT GLASS PASSIVATED FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 1000 V

Forward Current - 1.0 A

### FEATURES

Ideal for surface mounted applications.
Low leakage current.
Glass passivated chips.
Fast switching.
High temperature soldering guaranteed: 260°C/10 seconds

### MECHANICAL DATA

Case: Molded plastic use UL94V-0 recognized flame retardant epoxy.
Terminals: Plated terminals, solderable per MIL-STD-202, method 208
Polarity: Color band on body denotes cathode.
Mounting position: Any
Weight: 0.130 gram



Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	SA154	SA155	SA156	SA157	SA158	SA159	SA160	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	v
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	v
Maximum Average Forward Rectified Current at $T_{\rm T}\text{=}55^\circ\text{C}$	I <sub>(AV)</sub>	1.0					A		
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	IFSM	30				A			
Maximum Instantaneous Forward Voltage at 1.0 A	VF	1.3				v			
Maximum DC reverse current $T_A = 25^{\circ}C$ at rated DC blocking voltage $T_A = 125^{\circ}C$	I <sub>R</sub>	5 100					u A		
Maximum Reverse Recovery Time , Test	Trr	150 250 300				nS			
Typical junction capacitance	C	15				pF			
Operating Junction Temperature Range	TJ	-55 ~ +125				°C			
Storage Temperature Range	T <sub>stg</sub>	-55 ~ +150				°C			





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FORWARD SURGE CURRENT

8,3ms SINGLE HALF SINE-WAVE

100

(JEDEC Method) T,=25℃

FIG. 2 – MAXIMUM NON – REPETITIVE PEAK

30

25

20

15

10

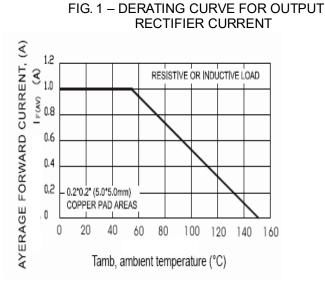
5

0

1

PEAK FORWARD SURGE CURRENT, (A)

### **Ratings And Characteristic Curves**



## FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

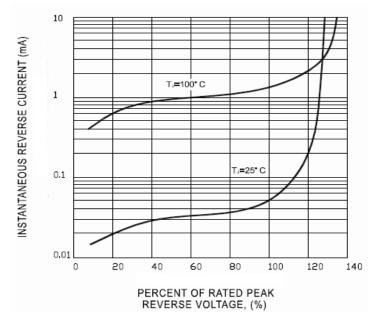
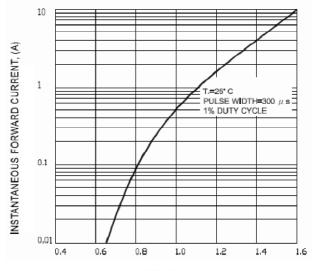


FIG. 4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

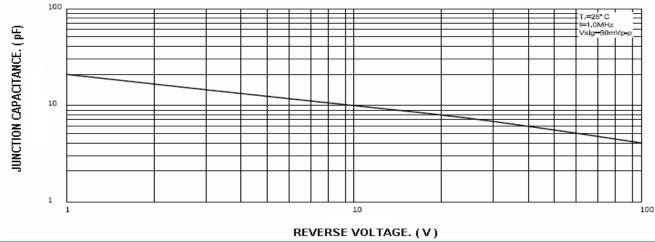
10

NUMBER OF CYCLES AT 60HZ



INSTANTANEOUS FORWARD VOLTAGE, (V)





Rev:BDXL

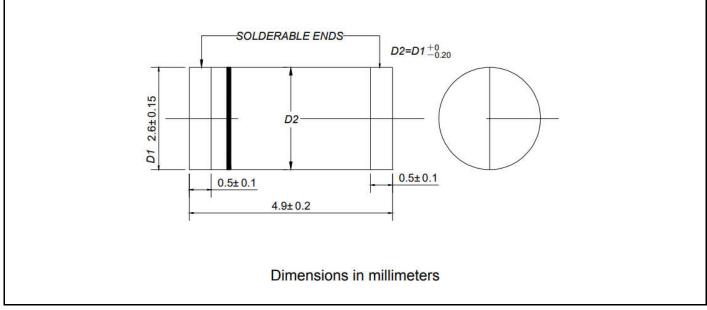


#### Ordering information

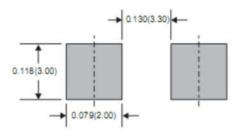
Package	Packing Description	Packing Quantity		
DO-213AB(MELF)	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton		

## **Package Dimensions**

## DO-213AB(MELF)



## The recommended mounting pad size



Dimensions in inches and (millimeters)



# Disclaimer

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