US2A THRU US2M

2.0AMP Surface Mount Glass Ultra Fast Rectifier

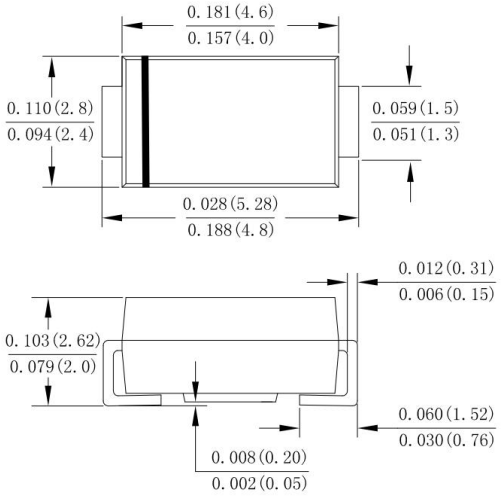
■ FEATURES

* Low cost
* Ultra fast switching for high efficiency
* High current capability

■ MECHANICAL DATA

* Case: Molded plastic SMA
* Polarity: Color band dentes cathode end
* Mounting position: Any
* Making: Type Number

Case: SMA(DO-214AC)



Dimensions in inches and (millimeters)

■ MAXIMUM RATINGS(Ta=25℃ Unless otherwise specified）

Rating at 25℃ ambient temperature unless otherwise specified
Single phase,half wave,60Hz,resistive or inductive load
For capacitive load derate current by 20%

Type Number	SYMBOL	US2A	US2B	US2D	US2G	US2J	US2K	US2M	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Average Rectified Output Current @TL=100 ℃	IF (AV)	2.0							A
Peak Forward Surge Current 8.3ms Single half sine -wave superimposed on rated load (JEDEC Method)	IFSM	60							A
Rating for fusing (t<8.3ms)	I^2t	14.94							A^2s
Forward Voltage @IF=2.0A	VFM	1.0			1.3	1.7			V
Peak Reverse Current @TA =25 ℃	I R	5.0							uA
At Rated DC Blocking Voltage @TA=125 ℃		200							
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			ns
Typical Junction Capacitance (Note 2)	CJ	15							pF
Typical Thermal Resistance Junction to Ambient	RθJA	90							℃/W
Operating Temperature Range	TJ	-55 to+150							℃
Storage Temperature Range	TSTG	-55 to +150							℃

Note: 1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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■ TYPICAL CHARACTERISTICS

Fig. 1 Forward Current Derating Curve

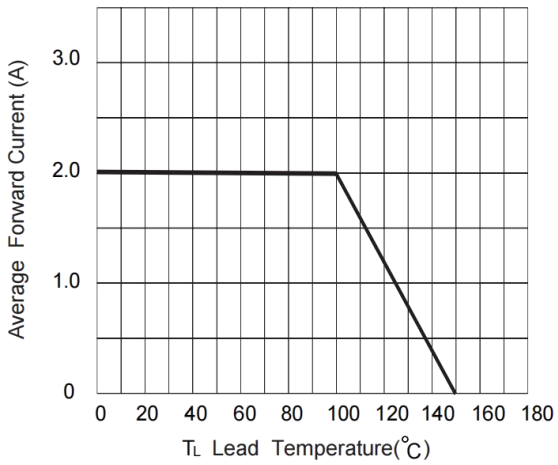

Fig. 2 Typ. Forward Characteristics

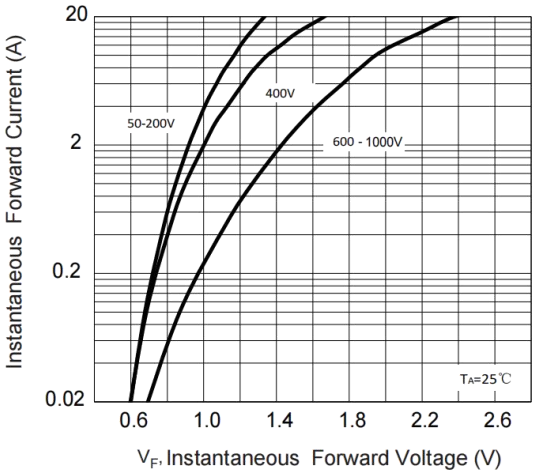

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

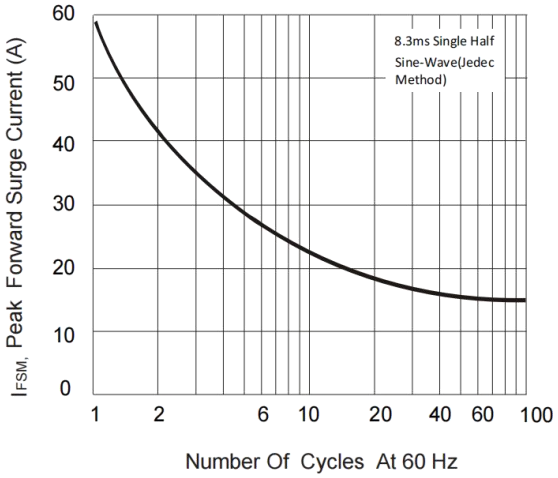

Fig.4 Typical Junction Capacitance

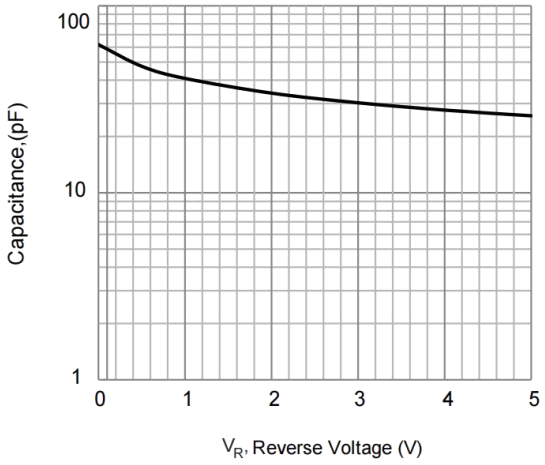

Fig.5 Typical Reverse Chracteristics

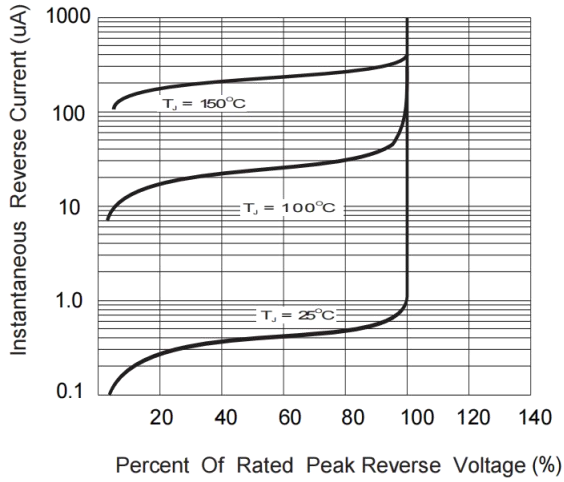

Fig.6 Mounting PAD Layout