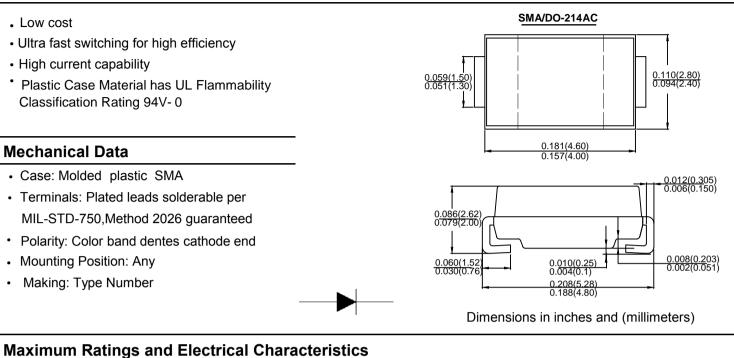


US2A THRU US2M

2.0AMP SURFACE MOUNT GLASS ULTRA FAST RECTIFIER

Features



Rating at 25°C 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 @T∟ =100°C	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)	l ² t	14.94							A²s
Forward Voltage @IF=2.0A	Vfm	1.0 1.3 1.7						V	
Peak Reverse Current @T₄ =25 ℃	5.0								
At Rated DC Blocking Voltage @T _A =125 $^\circ\!$	۱ _R	200							uA
Maximum Reverse Recovery Time (Note 1)	Trr	50 75						ns	
Typical Junction Capacitance (Note 2)	С	28							pF
Typical Thermal Resistance Junction to Ambient(Note 3)	R0 JA	20						°C/W	
Operating Temperature Range	TJ	-55 to+150							°C
Storage Temperature Range	Тѕтс	-55 to +150							°C

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

3. 8.0MM² (.013mm Thick) Land Areas.



US2A THRU US2M

INSTANTANEOUS FORWARD CURRENT(A)

FIG.1MAXIMUM AVERAGE FORWARD CURRENT DERATING AVERAGE FORWARD RECIFIEDCURRENT (A) 3.0 2.0 1.0 0 20 40 60 80 100 120 140 160 180 ٥ Lead Temperature (°C)

FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT

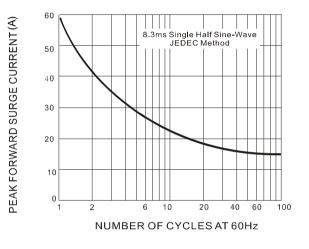
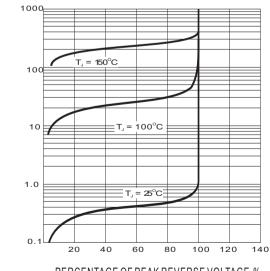
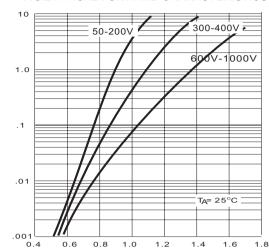


FIG.5TYPICAL REVERSE CHRACTERISTICS



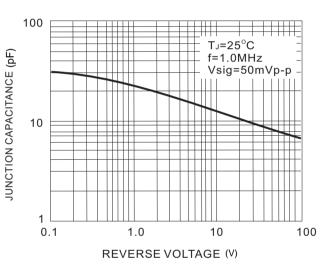
PERCENTAGE OF PEAK REVERSE VOLTAGE, %

FIG.2TYPICAL FORWARD CHARACTERISTICS

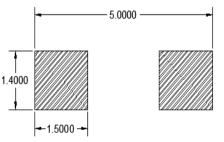


INSTANTANEOUS FORWARD VOLTAGE (V)

FIG.4TYPICAL JUNCTION CAPACITANCE



SMA PAD LAYOUT



INSTANTANEOUS REVERSE CURRENT (uA)



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from DIYI.
- DIYI reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- DIYI disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- DIYI does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

DIYI makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling the seproducts for use in such applications do so at their own risk and agree to fully indemnify DIYI for any damages resulting from such improper use or sale.
- Since DIYI uses lot number as the tracking base, please provide the lot number for tracking when complaining.