

U2A THRU U2M

2.0AMP SURFACE MOUNT GLASS ULTRA FAST RECTIFIER

Features

- . Low cost
- Ultra fast switching for high efficiency
- · High current capability
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- · Case: Molded plastic SMAF
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- · Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number



Maximum Ratings and Electrical Characteristics

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	U2A	U2B	U2D	U2G	U2J	U2K	U2M	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₋ =90 °C	F(AV)	2.0							А
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	60							A
I ² t Rating for Fusing (t < 8.3ms)	l²t	14.940							A ² s
Forward Voltage @IF=2.0A	VFM	1.0 1.3 1.7					V		
Peak Reverse Current @T _A =25 °C	5.0								
At Rated DC Blocking Voltage @T _A =125 $^{\circ}$ C	۱ _R	100						uA	
Maximum Reverse Recovery Time (Note1)	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.



U2A THRU U2M

INSTANTANEOUS FORWARD CURRENT(A)

JUNCTION CAPACITANCE (pF)

FIG.1MAXIMUM AVERAGE FORWARD CURRENT DERATING



FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT



FIG.5TYPICAL REVERSE CHRACTERISTICS



100°C

T. = 25°C

60

Т. =

PERCENTAGE OF PEAK REVERSE VOLTAGE,%

80

100 120

140





INSTANTANEOUS FORWARD VOLTAGE (V)

FIG.4TYPICAL JUNCTION CAPACITANCE



Fig.6 TYPICAL CAPACITANCE



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