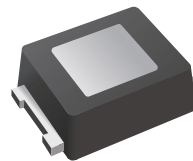




Features

- Top-side Cooling(TSC) Packaging technology
- Compact and Slim Packaging Solutions
- For surface mounted applications
- High efficiency
- Meets MSL level 1, per J-STD-020
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: SMHS
- Terminal: Leads solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Ordering Information

Part Number	Shipping	Reel
RHU1NS	15000PCS Tape&Reel	13 inchs

Maximum Ratings and Electrical Characteristics

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	Symbol	RHU1NS	Unit
	Marking	U1N	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Maximum RMS voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Rectified Current at $T_c = 110^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.65	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	I_R	1 100	μA
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	75	ns
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JC}$	62 7	$^\circ\text{C/W}$
Typical Junction Capacitance ⁽³⁾	C_j	15	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

(1) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

(2) P.C.B. mounted with $0.08'' \times 0.08''$ (2mm x 2mm) copper pad areas.

(3) Measured at 1 MHz and applied reverse voltage of 4 V D.C



Characteristics Curves

Fig.1 Forward Current Derating Curve

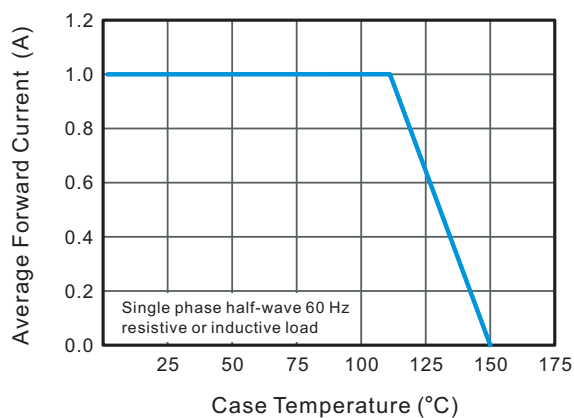


Fig.2 Typical Reverse Characteristics

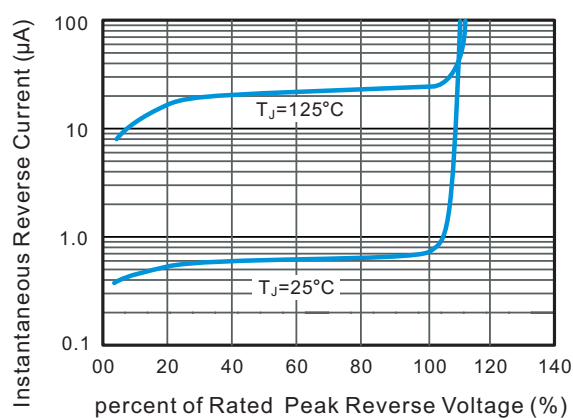


Fig.3 Typical Forward Characteristics

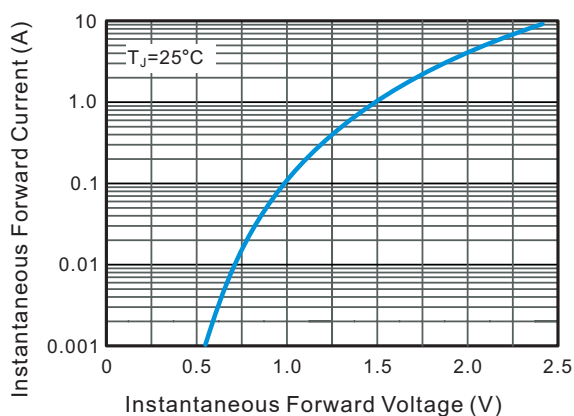


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

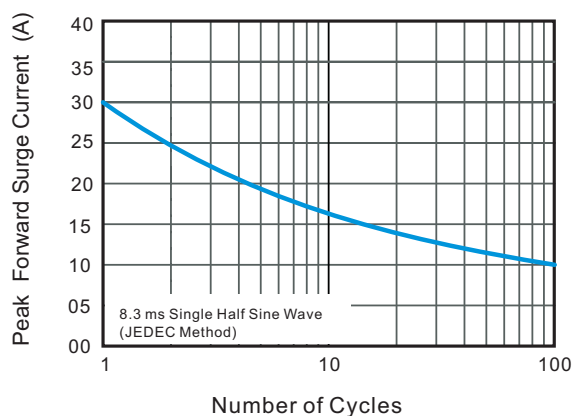
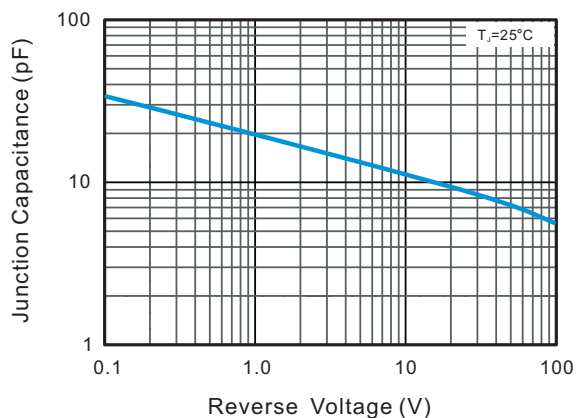


Fig.5 Typical Junction Capacitance





UNIT		A	C	D	E	H _E	d	e	f	h	∠
mm	max	0.99	0.25	2.90	2.10	3.50	1.30	1.30	1.25	0.70	6°
	min	0.83	0.15	2.50	1.70	2.90	1.10	1.10	1.05	0.50	

1. Controlling dimension:in millimeters.
2. General tolerance:±0.05mm
3. The pad layout is for reference purpose only.



Carrier Tape Dimensions

Unit : mm

Symbol	Spec	Symbol	Spec
W	8.00±0.10	P2	2.00±0.10
E	1.75±0.10	t	0.22±0.02
F	3.50±0.10	t1	Min. 0.05
D0	1.55±0.10	A0	2.15±0.10
D1	1.05±0.10	B0	3.40±0.10
P0	4.00±0.10	K0	1.15±0.10
P1	4.00±0.10		

Reel Dimensions

Unit : mm

13" Reel

D5	Φ330.0±5.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	8.0±2.0
Quantity: 15000PCS	

Packaging

SMHS

15000 PCS/Reel

5 Reel/Inner Box
75K PCS/Inner Box

Dim(Unit:mm)
340mm*340mm*85mm

4 Boxes per carton
300K PCS per carton

Dim(Unit:mm)
360mm*360mm*355mm

13 inches Reel



Recommended Soldering Conditions

