

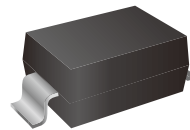


RHS2AW THRU RHS2MW

Surface Mount General Rectifier

Features

- Glass passivated chip junction
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

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

Ordering Information

Part Number	Shipping	Reel
RHS2AW THR RHS2MW	8000PCS Tape&Reel	13 inches

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	RHS2AW	RHS2BW	RHS2DW	RHS2GW	RHS2JW	RHS2KW	RHS2MW	Unit
	Marking	S2AW	S2BW	S2DW	S2GW	S2JW	S2KW	S2MW	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L=75^{\circ}C$	$I_{(AV)}$	2							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage at 2 A	V_F	1.1							V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Blocking Voltage $T_a = 125^{\circ}C$	I_R	5 50							μA
Typical Junction Capacitance (Note1)	C_J	30							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	50							$^{\circ}C/W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$

Note:(1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.

(2) P.C.B. mounted with 0.2" × 0.2"(5.0mm × 5.0mm) copper pad areas.



Characteristics Curves

Fig. 1 FORWARD CURRENT DERATING CURVE

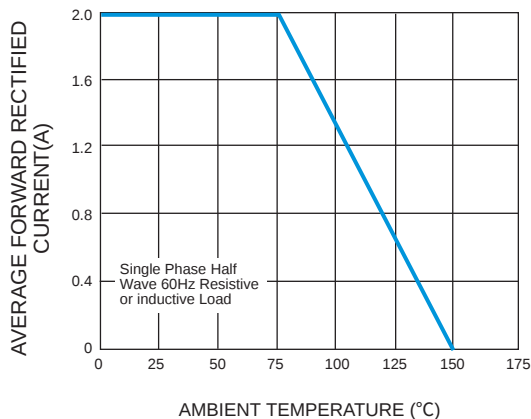


Fig. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

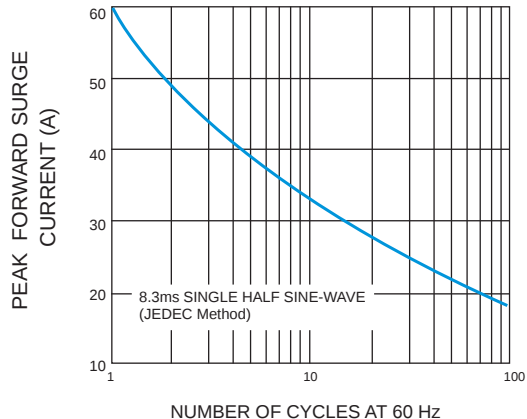


Fig. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

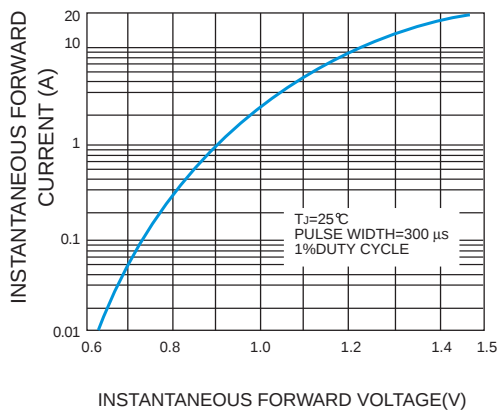


Fig. 4 TYPICAL REVERSE CHARACTERISTICS

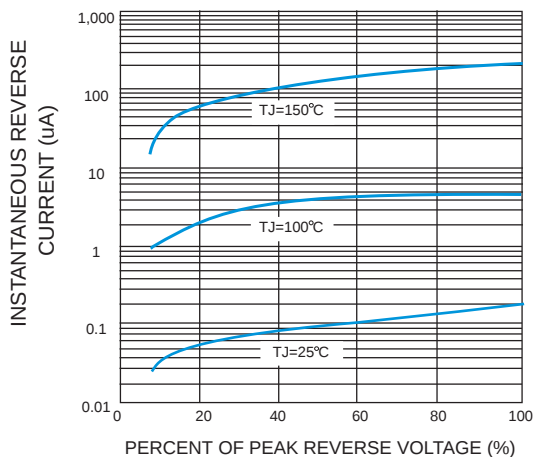


Fig. 5 TYPICAL JUNCTION CAPACITANCE

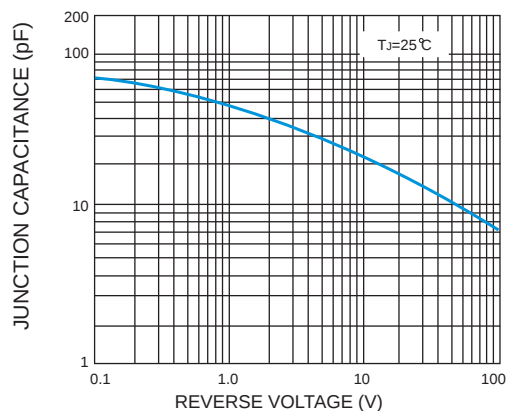
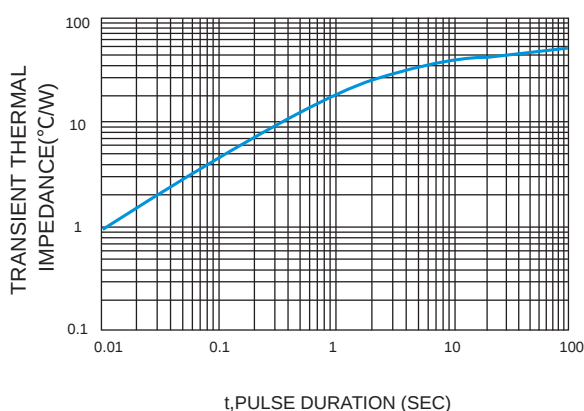
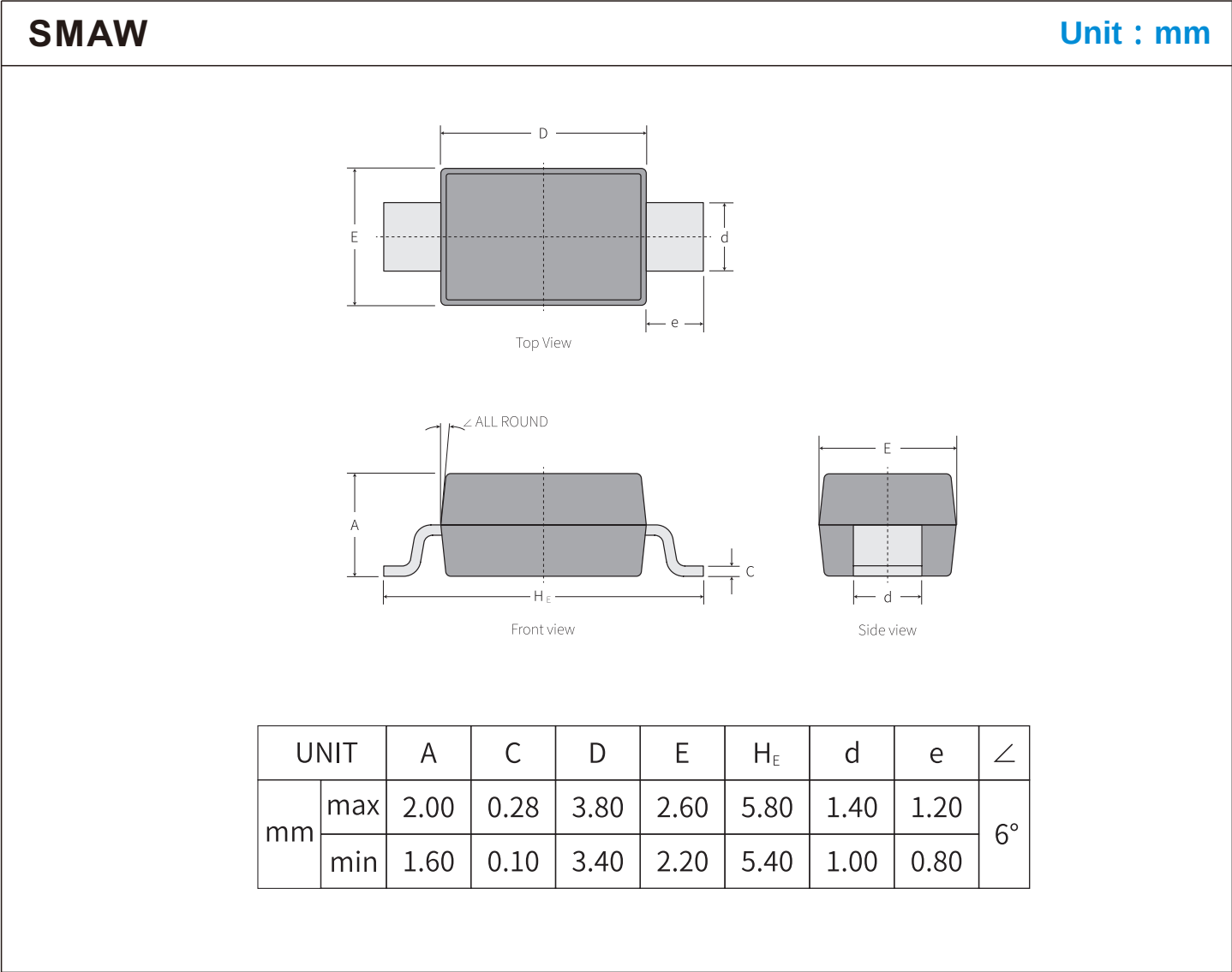


Fig. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

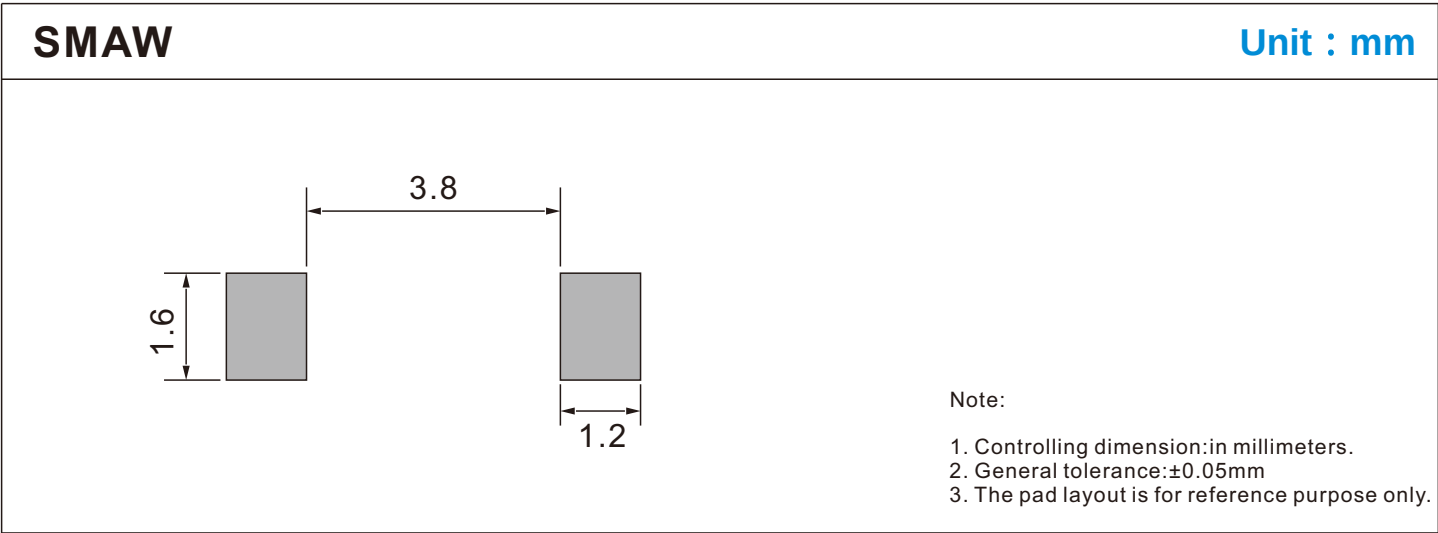




Package Outline



Suggested Pad Layout



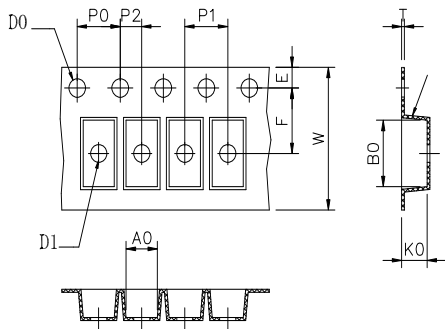


RHS2AW THRU RHS2MW

Surface Mount General Rectifier

Carrier Tape Dimensions

Unit : mm

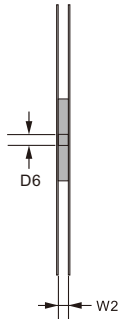
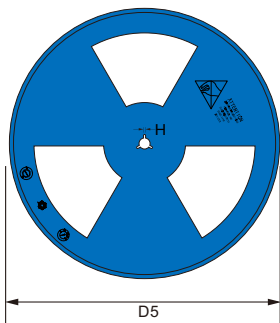


Symbol	Spec	Symbol	Spec
W	12.00±0.10	P1	4.00±0.10
E	1.75±0.10	P2	2.00±0.05
F	5.50±0.05	T	0.25±0.02
D0	1.55±0.05	A0	2.60±0.10
D1	1.50±0.10	B0	5.70±0.10
P0	4.00±0.10	K0	2.00±0.05

Reel Dimensions

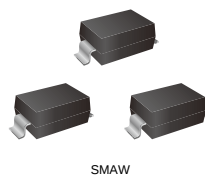
Unit : mm

13" Reel

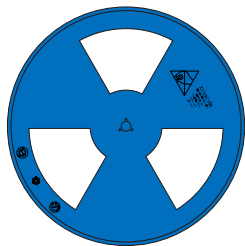


D5	Φ330.0±2.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±2.0
Quantity: 8000PCS	

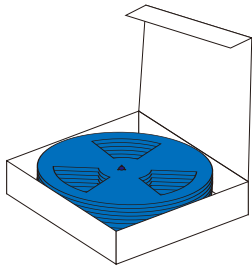
Packaging



8000PCS/Reel



5Reel/Inner Box
40KPCS/Inner Box



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

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

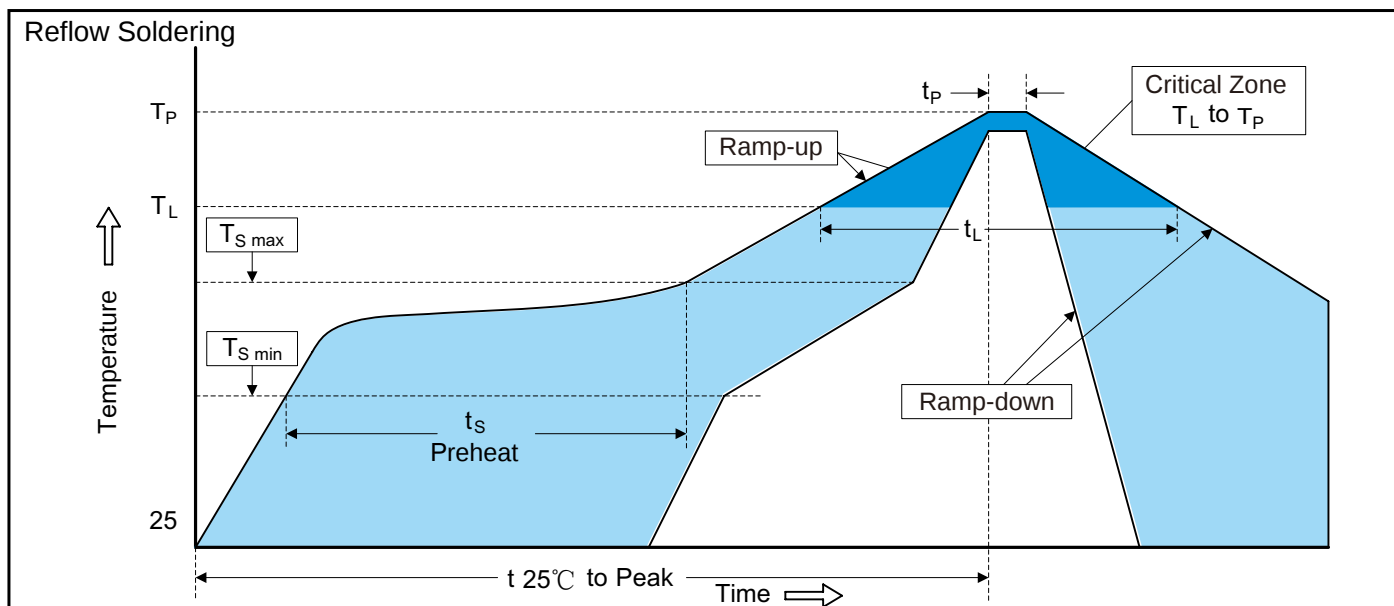


4 Boxes per carton
160KPCS per carton

13 inches Reel



Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat	
-Temperature Min ($T_{S\ min}$)	150°C
-Temperature Max ($T_{S\ max}$)	200°C
-Time (min to max) (t_s)	60-180 seconds
$T_{S\ max}$ to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T_L)	217°C
-Time (t_L)	60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.