

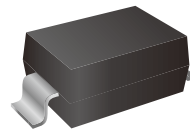


RH22AW THRU RH220AW

Surface Mount Schottky Barrier Rectifier

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- 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
RH22AW THR RH220AW	8000PCS 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	RH22AW	RH24AW	RH26AW	RH28AW	RH210AW	RH212AW	RH215AW	RH220AW	Unit
	Marking	S22W	S24W	S26W	S28W	S210W	S212W	S215W	S220W	
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum instantaneous forward voltage at 2A	V _F	0.55	0.55	0.7	0.85	0.85	0.85	0.95	0.95	V
Maximum average forward rectified current	I _{F(AV)}	2								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50								A
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5 5			0.3 3				mA	
Typical Junction Capacitance (Note1)	C _J	220		80						pF
Typical thermal resistance (Note2)	R _{θJA}	80								°C/W
Operating junction temperature range	T _J	-55 to +125								°C
Storage temperature range	T _{STG}	-55 to +150								°C

Note:(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.
(2) P.C.B. mounted with 2.0" × 2.0" (5cm × 5cm) copper pad areas.



Ratings and Characteristics Curves

FIG.1 FORWARD CURRENT DERATING CURVE

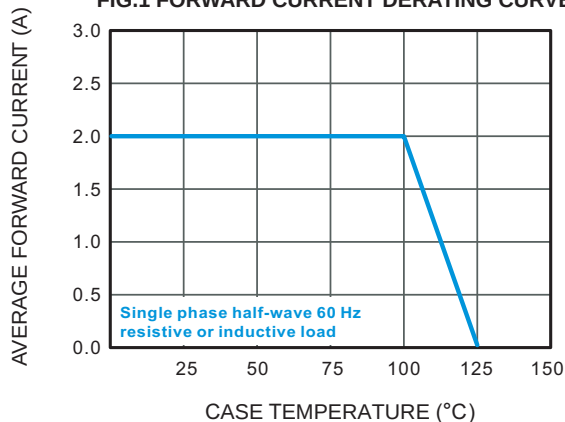


FIG.2 TYPICAL REVERSE CHARACTERISTICS

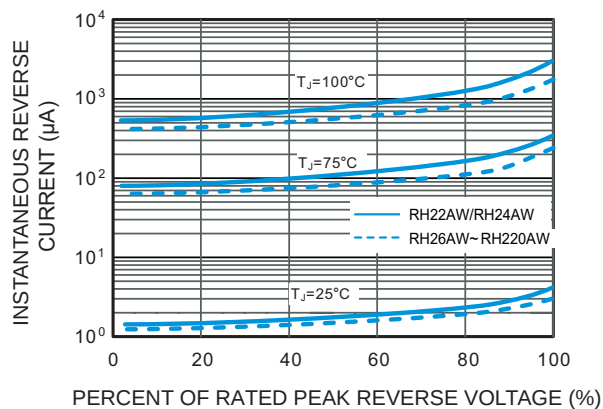


FIG.3 TYPICAL FORWARD CHARACTERISTICS

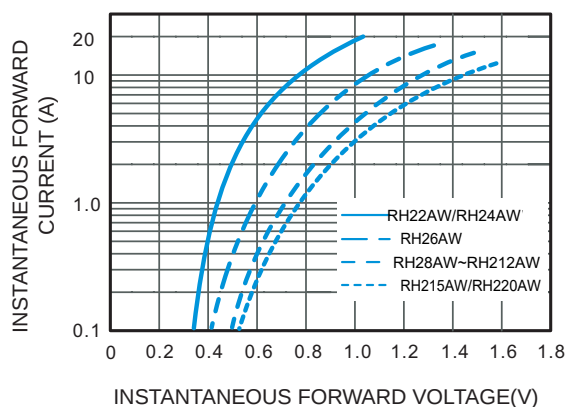


FIG.4 TYPICAL JUNCTION CAPACITANCE

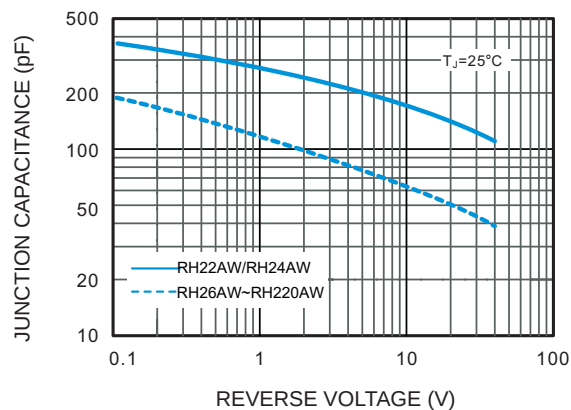


FIG.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

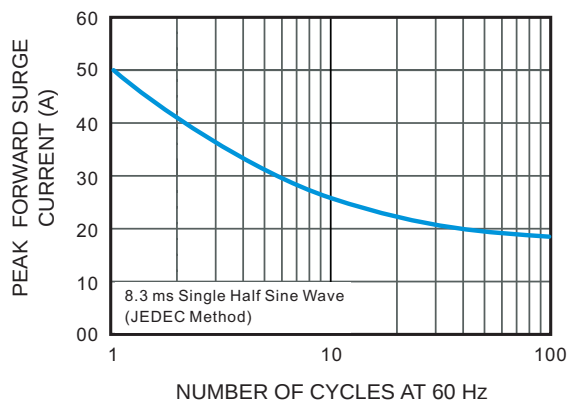
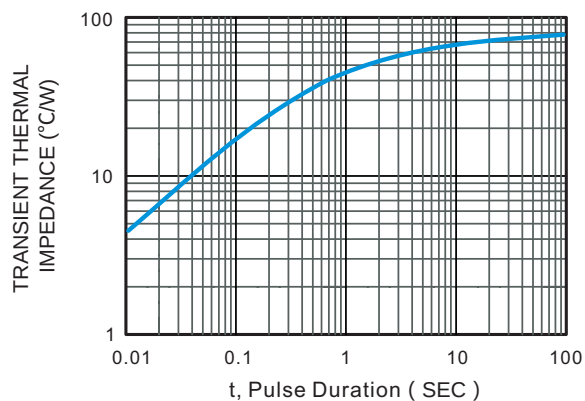


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE





SMAW

The image displays three orthographic views of a mechanical component:

- Top View:** Shows a central rectangular block with a rounded top and bottom. It has two rectangular protrusions on the left and right sides. Dimensions include D (total width), E (total height), d (height of the side protrusions), and e (width of the side protrusions).
- Front View:** Shows the component from the front. It features a central rectangular block with rounded top and bottom edges, indicated by the note "ALL ROUND". Two curved, flared protrusions extend from the left and right sides. Dimensions include A (height of the side protrusions), H_E (total width), and C (thickness of the central block).
- Side View:** Shows the component from the side. It features a central rectangular block with a rounded top and bottom. Two rectangular protrusions extend from the left and right sides. Dimensions include E (total height), d (width of the side protrusions), and C (thickness of the central block).

UNIT		A	C	D	E	H _E	d	e	∠
mm	max	2.00	0.28	3.80	2.60	5.80	1.40	1.20	6°
	min	1.60	0.10	3.40	2.20	5.40	1.00	0.80	

SMAW

A diagram of a composite figure consisting of two gray rectangles. The left rectangle has a height of 1.6. The right rectangle has a width of 1.2. The horizontal distance between the right side of the left rectangle and the left side of the right rectangle is 3.8.

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

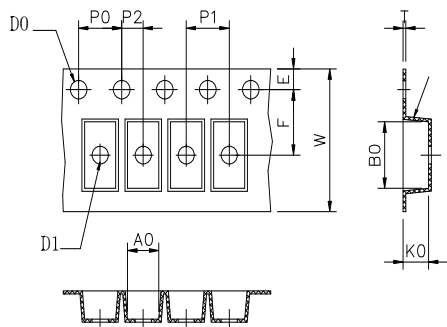


RH22AW THRU RH220AW

Surface Mount Schottky Barrier Rectifier

Carrier Tape Dimensions

Unit : mm

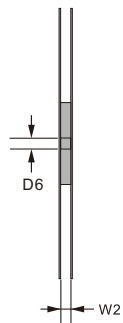
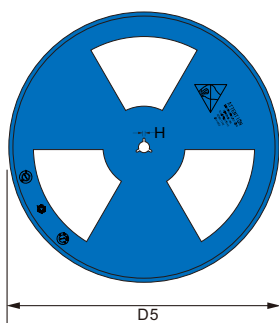


Symbol	Spec	Symbol	Spec
W	12.00±0.10	P1	4.00±0.10
E	1.75±0.10	P2	2.00±0.05
F	5.50±0.05	T	0.25±0.02
D0	1.55±0.05	A0	2.60±0.10
D1	1.50±0.10	B0	5.70±0.10
P0	4.00±0.10	K0	2.00±0.05

Reel Dimensions

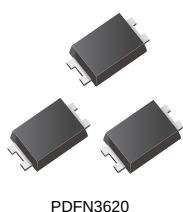
Unit : mm

13" Reel

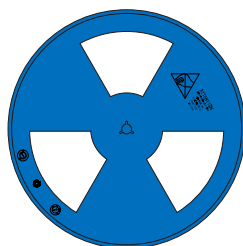


D5	Φ330.0±2.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±2.0
Quantity: 8000PCS	

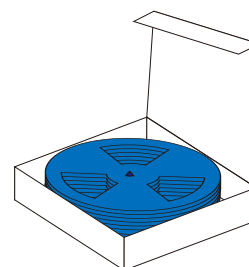
Packaging



12000PCS/Reel

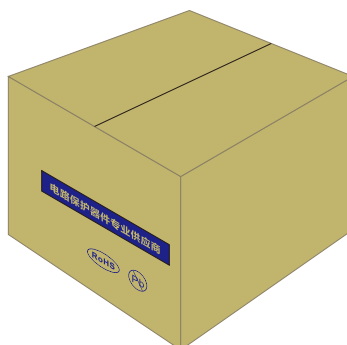


5Reel/Inner Box
60KPCS/Inner Box



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

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



4 Boxes per carton
240 KPCS 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.