

0.5A SURFACE-MOUNT STANDARD RECOVERY BRIDGE RECTIFIER

Product Summary

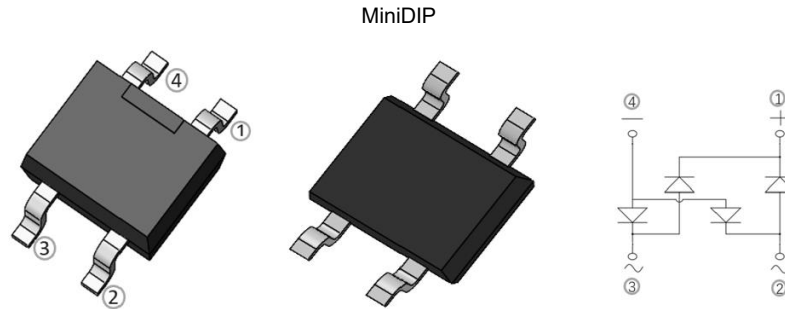
V _{RRM} (V)	I _F (A)	V _F Max (V) @ I _F = 0.4A	I _R Max (μA)
200, 400, 600	0.5	1.15	5

Mechanical Data

- Package: MiniDIP
- Package Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – Bright Tin. Plated Leads, Solderable per MIL-STD-202, Method 208 @3
- Polarity: As Marked on Case
- Weight: 0.125 grams (Approximate)

Features and Benefits

- Glass Passivated Die Construction
- Low-Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Miniature Package Saves Space on PC Boards
- UL Recognized File # E364304
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](mailto:contact@diodes.com) or your local Diodes representative.**
<https://www.diodes.com/quality/product-definitions/>

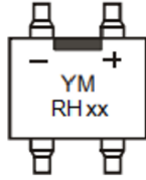


Ordering Information (Note 3)

Orderable Part Number	Package	Packing	
		Qty.	Carrier
RH02-T	MiniDIP	3000pcs	Tape & Reel
RH04-T	MiniDIP	3000pcs	Tape & Reel
RH06-T	MiniDIP	3000pcs	Tape & Reel

- Notes:
- EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
 - See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
 - For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

Marking Information



RHxx = Product Type Marking Code (ex: RH04)
 YM = Date Code Marking
 Y = Last Digit of the Year (ex: 6 = 2026)
 M = See Month/Code Table Below

Date Code Key

Year	2004	-	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Code	4	-	6	7	8	9	0	1	2	3	4	5

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	RH02	RH04	RH06	Unit
Peak Repetitive Reverse Voltage	V _{RMM}				
Working Peak Reverse Voltage	V _{RWM}	200	400	600	V
DC Blocking Voltage	V _{DC}				
RMS Reverse Voltage	V _{RMS}	140	280	420	V
Average Forward Rectified Current (Note 4) @T _A = +40°C	I _O	0.5			A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	30			A
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150			°C
Maximum Reverse-Recovery Time (Note 4)	t _{RR}	150	150	250	ns

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Typ	Max	Unit
Instantaneous Voltage Drop @ 0.4A (Per Element)	V _F	—	1.15	V
Peak Reverse Current at Rated @T _A = +25°C	I _R	—	5.0	μA
DC Blocking Voltage (Per Element) @T _A = +125°C			100	
Typical Total Capacitance (Per Element) (Note 5)	C _J	13	—	pF

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 6)	R _{θJA}	85	°C/W

Notes: 4. trr test conditions: I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
 5. Measured at 1.0MHz and applied reverse voltage of 4.0V.
 6. Mounted on PC board.

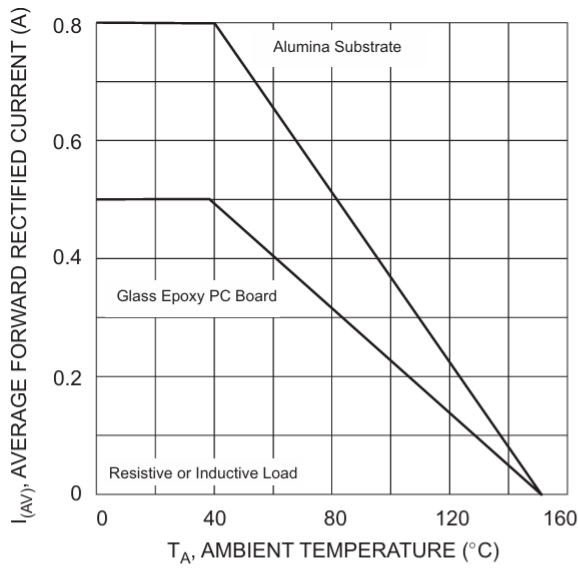


Fig. 1 Output Current Derating Curve

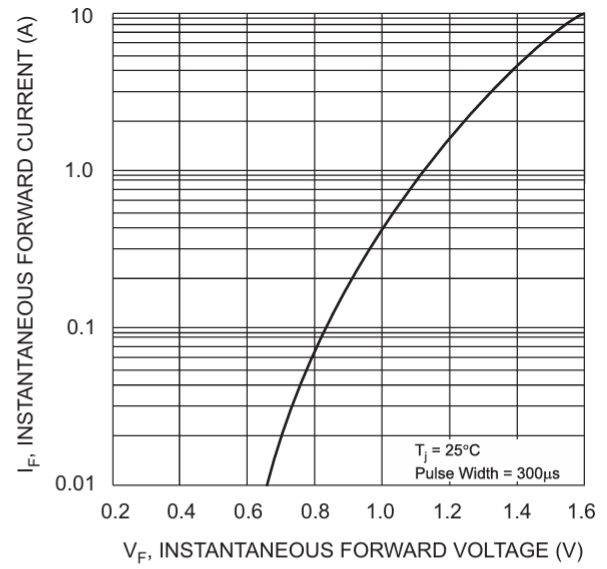


Fig. 2 Typical Forward Characteristics (per leg)

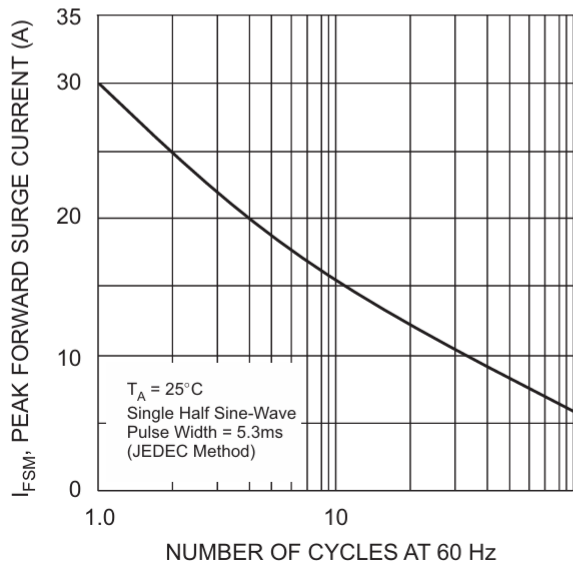


Fig. 3 Maximum Peak Forward Surge Current (per leg)

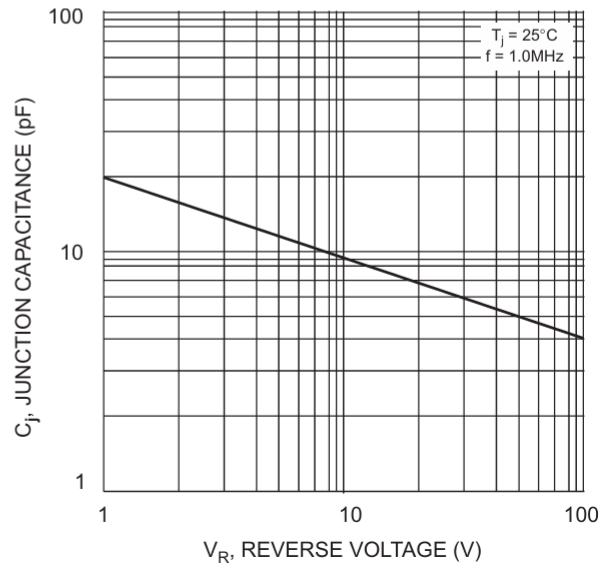
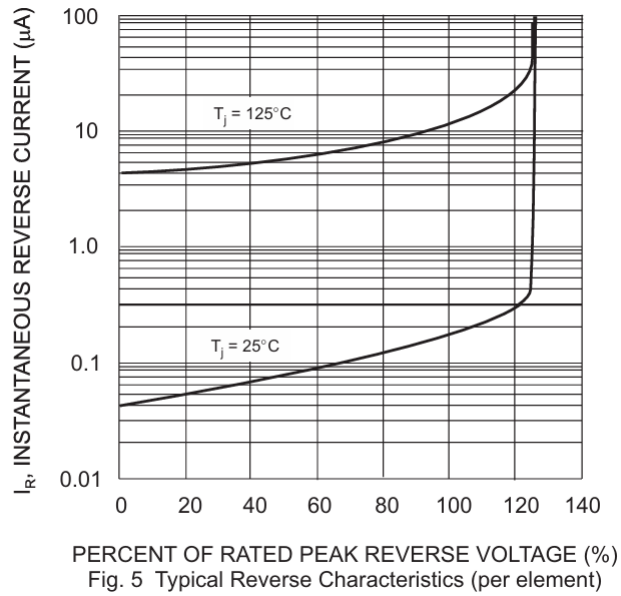


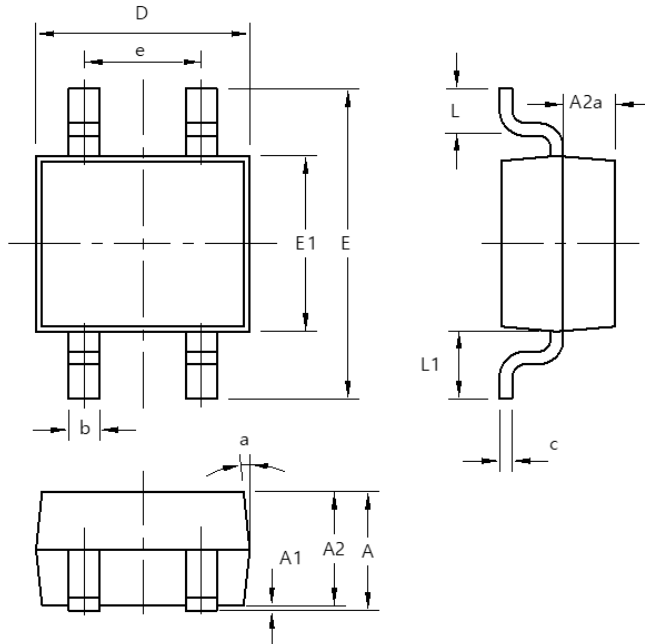
Fig. 4 Typical Junction Capacitance



Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

MiniDIP

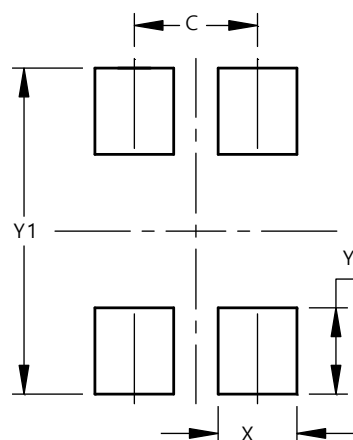


MiniDIP		
Dim	Min	Max
A	--	3.00
A1	--	0.20
A2	2.30	2.70
A2a	1.10	1.20
b	0.50	0.80
c	0.15	0.35
D	4.50	4.90
E	--	7.00
E1	3.60	4.00
e	2.30	2.70
L	0.70	1.10
L1	1.30	1.70
a	7° TYP	
All Dimensions in mm		

Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

MiniDIP



Dimensions	Value (in mm)
C	2.50
X	1.65
Y	1.80
Y1	6.80

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