

SDB3005P

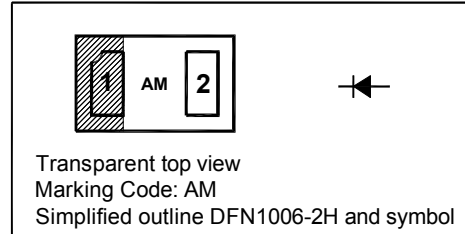
Surface Mount Schottky Barrier Rectifiers

Features

- Ultra small power mold type
- Low V_F
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Forward Current	I_F	0.5	A
Repetitive Peak Forward Current ($t_p \leq 1$ ms)	I_{FRM}	1	A
Peak Forward Surge Current ($t_p = 8.3$ ms)	I_{FSM}	3	A
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.1$ mA at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 500$ mA	V_F	180 200 270 360 500	mV
Reverse Current at $V_R = 10$ V at $V_R = 30$ V	I_R	200 500	μA
Total Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_T	30	pF

TOP DYNAMIC



Dated: 19/05/2015 Rev: 03

Fig 1. Forward current as a function of forward voltage; typical values

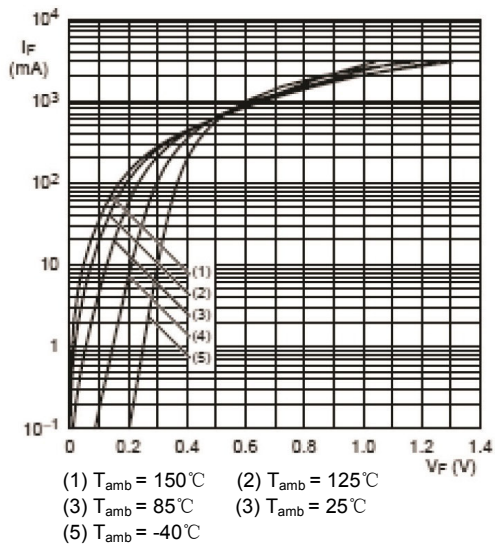


Fig 2. Reverse current as a function of reverse voltage; typical values

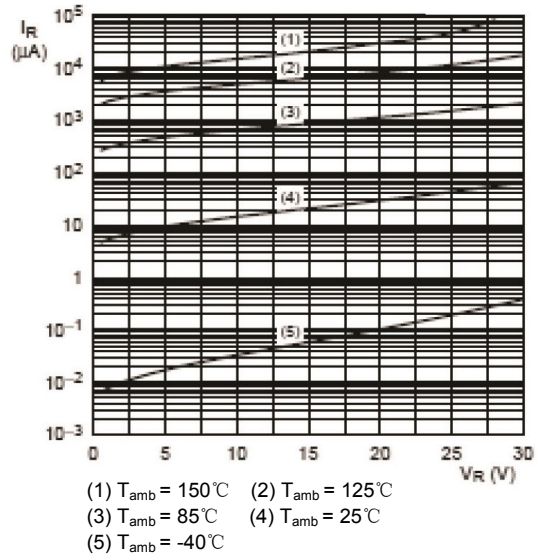
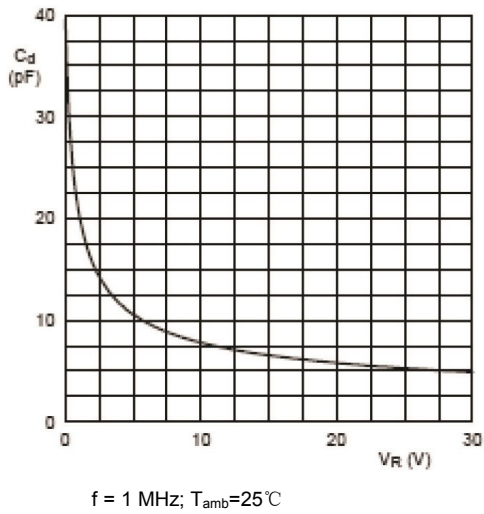


Fig 3. Diode capacitance as a function of reverse voltage; typical values

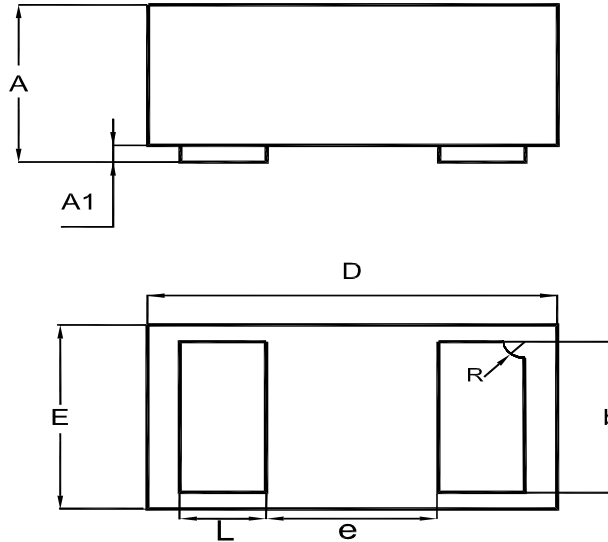


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PACKAGE OUTLINE

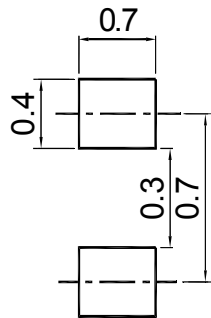
Plastic surface mounted package

DFN1006-2H



UNIT	A	A1	b	D	E	e	L	R
mm	0.51	0.05	0.55	1.05	0.65	0.4	0.3	0.15
	0.46	0	0.45	0.95	0.55		0.2	0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2H	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

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