

# SDB2005BP

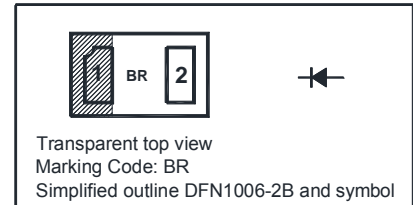
## Surface Mount Schottky Barrier Rectifiers

### Features

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

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

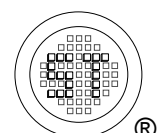


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

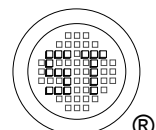
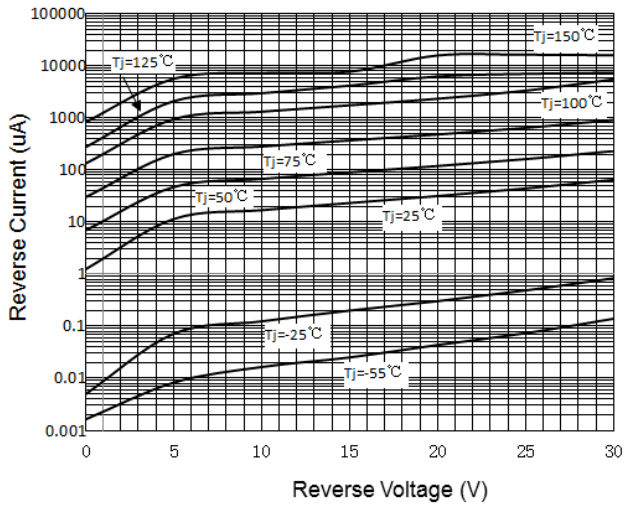
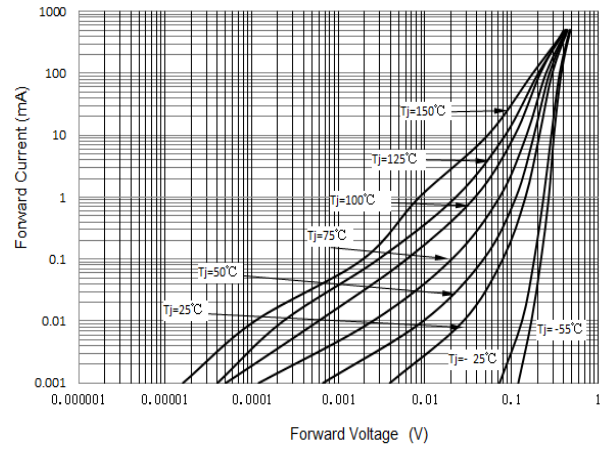
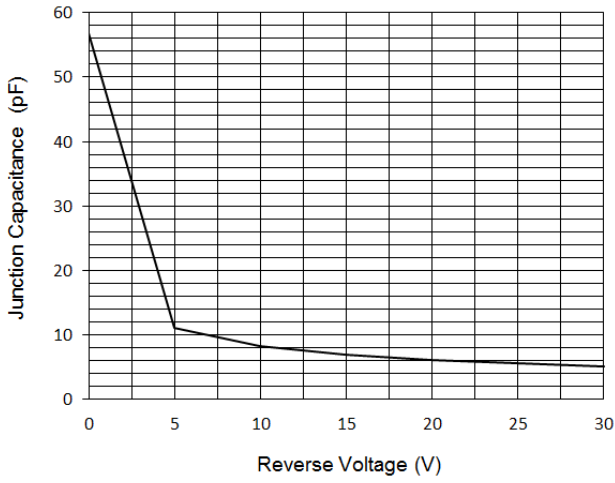
Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	20	V
Forward Current	$I_F$	500	mA
Peak Forward Surge Current ( $t_p = 8.3$ ms)	$I_{FSM}$	3	A
Power Dissipation	$P_{tot}$	100	mW
Maximum Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1000	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_J, T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 500 \mu\text{A}$	$V_{(BR)R}$	20	-	V
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	$V_F$	- - - - -	180 240 290 380 500	mV
Reverse Current at $V_R = 10$ V	$I_R$	-	30	$\mu\text{A}$
Total Capacitance at $V_R = 1$ V, $f = 1$ MHz	$C_T$	-	30	pF



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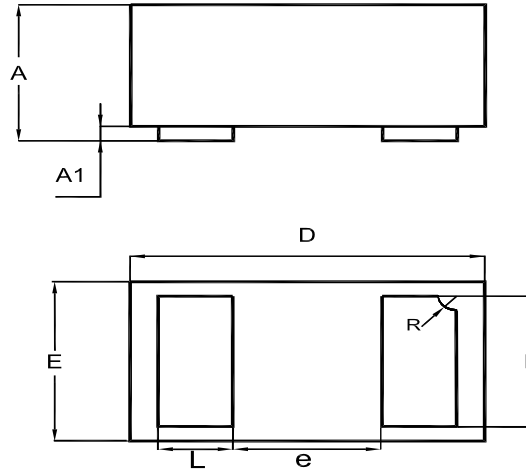


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## PACKAGE OUTLINE

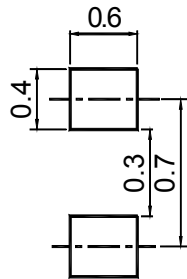
Plastic surface mounted package; 2 leads

DFN1006-2B



UNIT	A	A1	b	D	E	e	L	R
mm	0.40	0.05	0.55	1.05	0.65	0.4	0.3	0.15
	0.36	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	
DFN1006-2B	8	2 ± 0.1	0.079 ± 0.004	178	7	10,000

## Marking information

" BR " = Part No.

Font type: Arial

