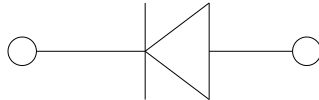


## Schottky Rectifier



### Features

- $V_R$  40V
- $I_{FAV}$  0.5A
- For Surface Mount Application
- Moisture Sensitivity Level 1

### Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 4

### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		40
Reverse Voltage	$V_R$	V		40
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	A	8.3ms, half sine	5.5
Repetitive Peak Forward Current	$I_{FRM}$	A	tp=1ms, $\delta=0.25$	5
Average forward current	$I_{FAV}$	A		0.5
Power dissipation	$P_D$	mW		250
Junction temperature	$T_J$	°C		-55 to +125
Storage temperature range	$T_{sig}$	°C		-55 to +150

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Breakdown Voltage	$V_R$	V	$I_R=20\mu A$	40		
Forward Voltage	$V_F$	V	$I_F=0.5A, T_A=25^\circ C$			0.55
Reverse Leakage Current	$I_R$	$\mu A$	$V_R=40V$			80
Junction Capacitance	$C_J$	pF	$V_R=4V, f=1MHz$		30	

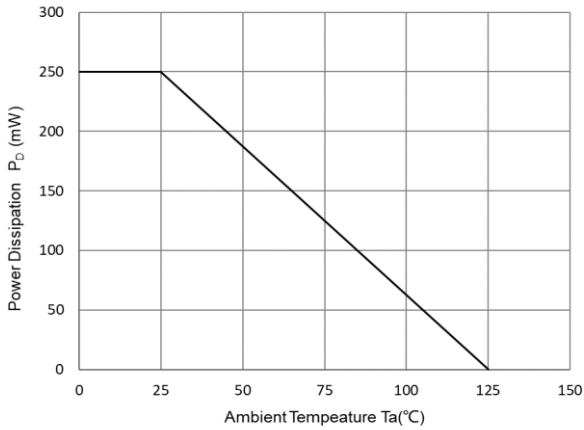
### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B0540WS	F2	Approximate 0.0048	3000	30000	120000	7" reel

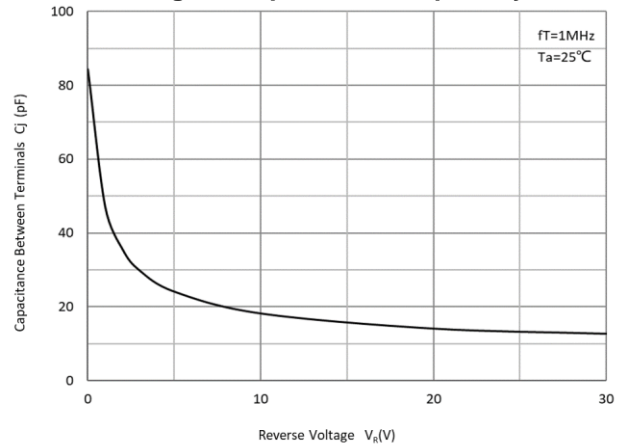


## ■ Characteristics (Typical)

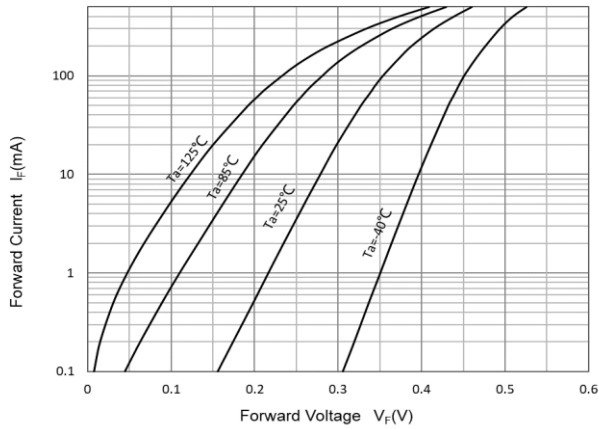
### Fig 1: $P_D$ - $T_a$ Curve



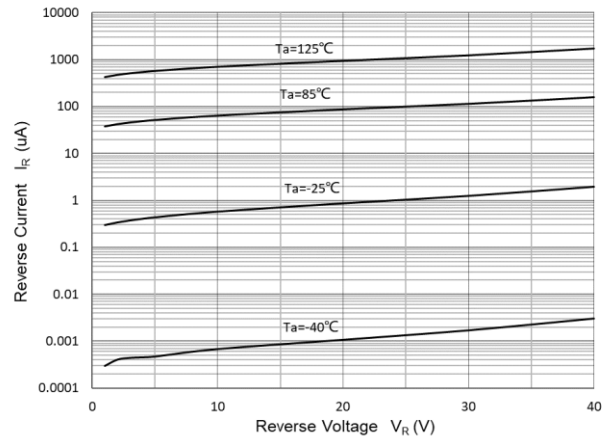
### Fig 2: Capacitance Capability



### Fig 3: Typical Forward Characteristics

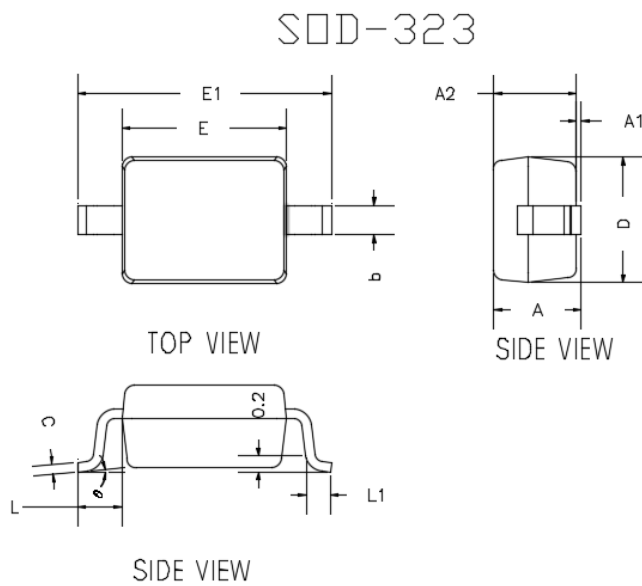


### Fig 4: Typical Reverse Characteristics





## ■Outline Dimensions

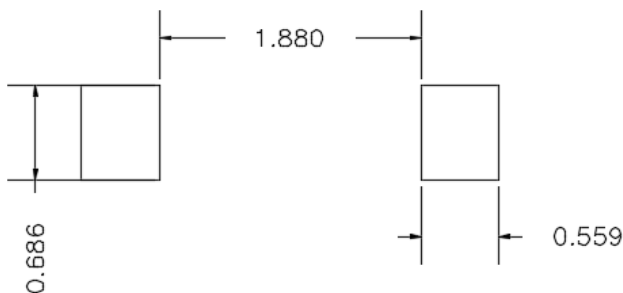


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

Note:

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances:  $\pm 0.10\text{mm}$  unless otherwise specified.  
[通用公差为 $\pm 0.10\text{mm}$ , 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.  
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[D和E是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]

## ■Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



## B0540WS

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