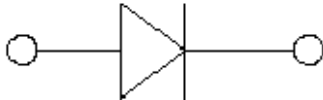


## Schottky Rectifier



### Features

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



### Mechanical Data

- **Package:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** R41

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	V		40
DC Blocking Voltage	$V_R$	V		40
Peak forward surge current	$I_{FSM}$	A	8.3ms, half sine	5.5A
Average forward current	$I_{FAV}$	A		0.5
Power dissipation	$P_{tot}$	mW		410
Maximum junction temperature	$T_j$	°C		-55 to +150
Storage temperature range	$T_{stg}$	°C		-55 to +150

### ■Ordering Information (Example)

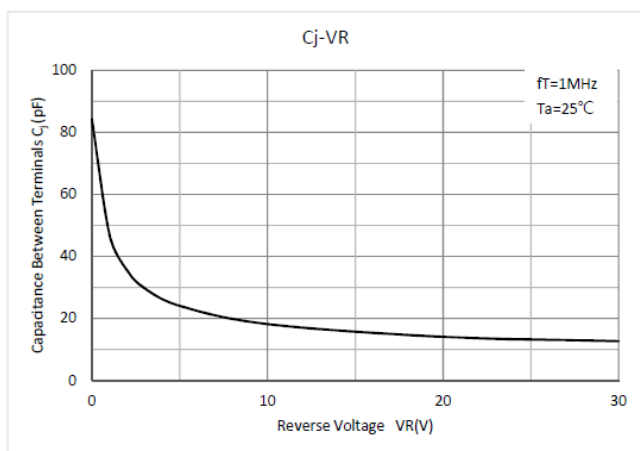
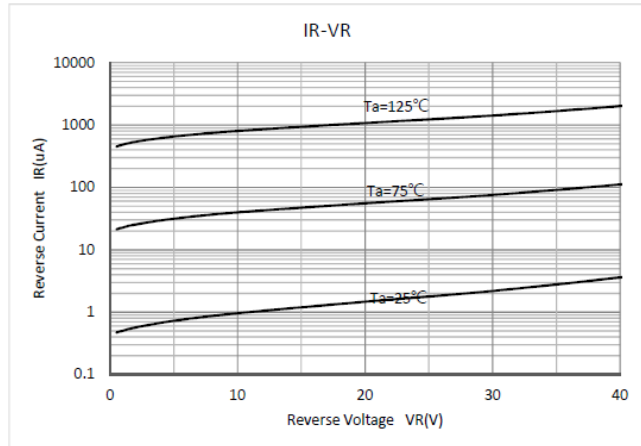
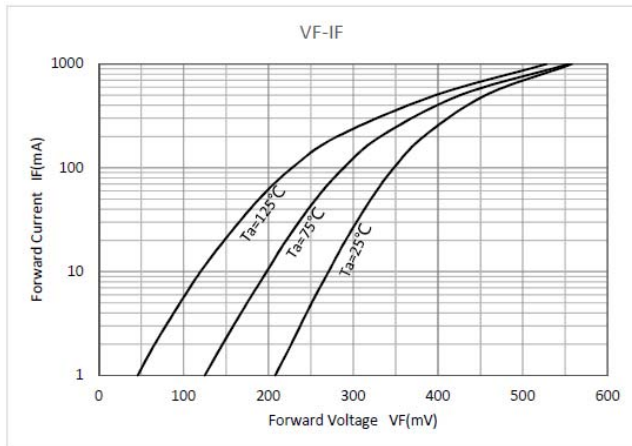
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B0540W	F2	Approximate 0.011	3000	30000	120000	7" reel

### ■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	$I_F=0.5A, T_A=25^\circ C$			0.51
			$I_F=1A, T_A=25^\circ C$			0.62
Reverse Leakage Current	$I_R$	$\mu A$	$V_R=20V$			10
			$V_R=40V$			20
Junction Capacitance	$C_J$	pF	$V_R=4V, f=1MHz$		30	



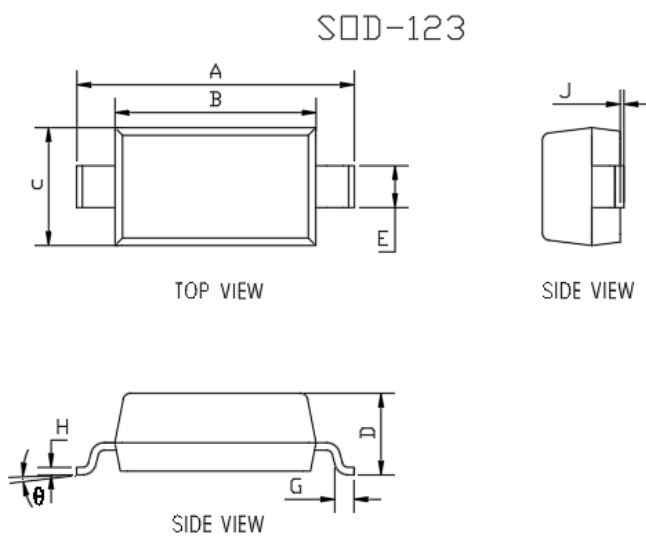
## ■ Characteristics (Typical)





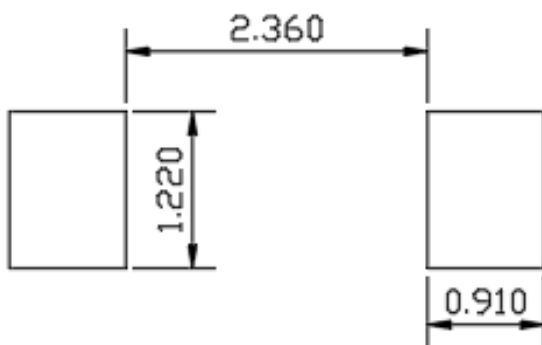
## B0540W

### ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
$\theta$	0	8°	0	8°

### ■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



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