



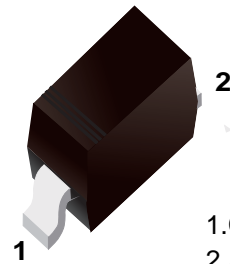
THE DATASHEET OF B0540WS



Schottky Barrier Diode

■ Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version



1.Cathode
2.Anode

■ Simplified outline(SOD-323)

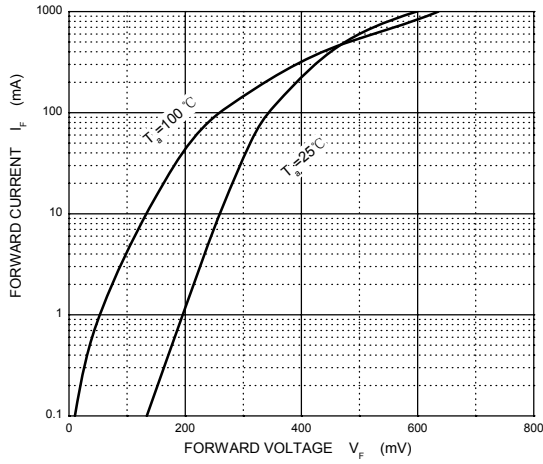
■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbo	Value	Unit
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
RMS reverse voltage reverse voltage (DC)	$V_{R(RMS)}$	28	V
Average rectified output current	I_o	0.5	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	5.5	A
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	°C/W
Junction temperature	T_j	125	°C
Storage temperature	T_{STG}	-55~+150	°C
Voltage rate of change	dv/dt	1000	V/ μ s

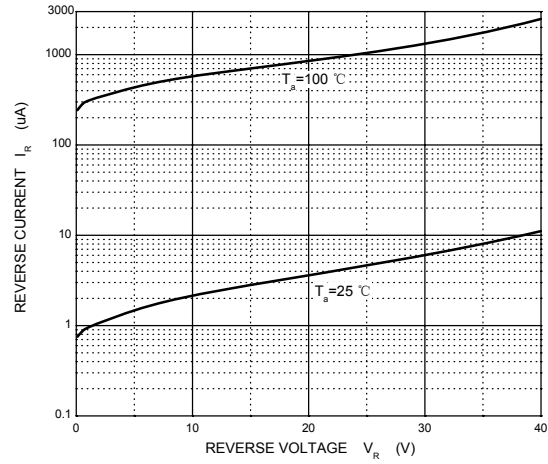
■ Electrical Characteristics Ta = 25°C

	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=20\mu A$	40		V
Reverse current	I_R	$V_R=20V$		10	μA
		$V_R=40V$		20	
Forward voltage	V_F	$I_F=0.5A$		0.51	V
		$I_F=1.0A$		0.62	
Capacitance between terminals	C_T	$V_R=0, f=1MHz$		170	pF

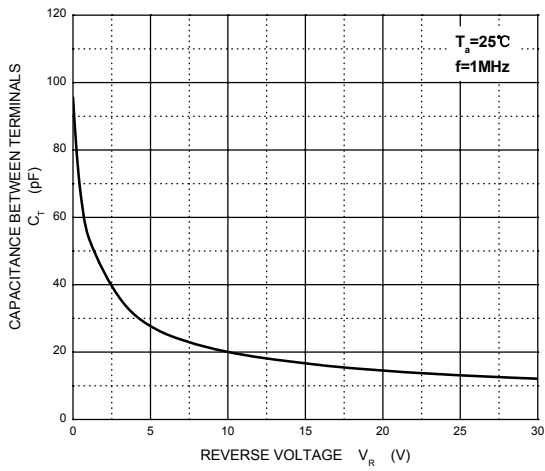
Forward Characteristics



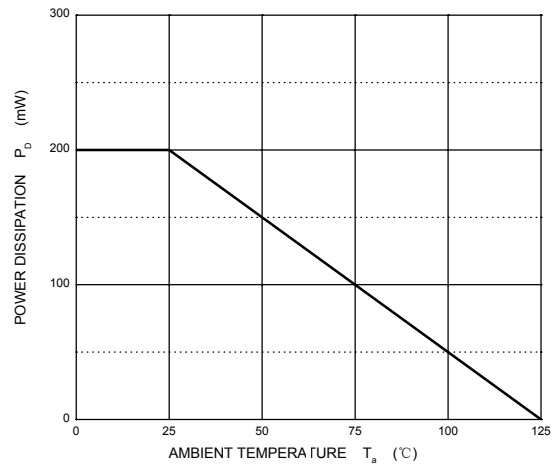
Reverse Characteristics



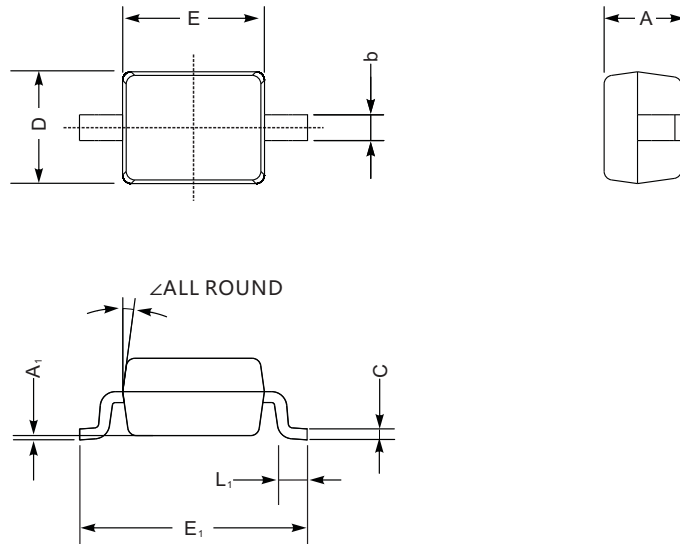
Capacitance Characteristics



Power Derating Curve



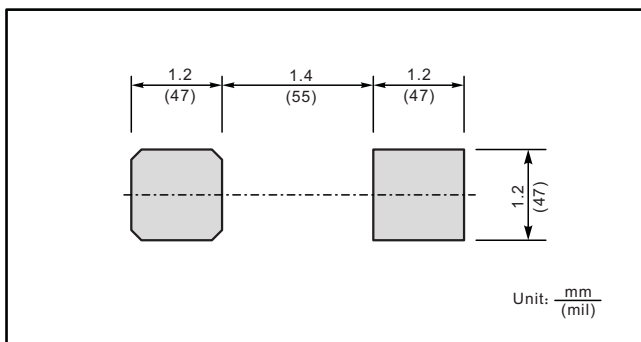
■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

■ The recommended mounting pad size



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