

Schottky Rectifier Diode

Low Forward Voltage Schottky Rectifier

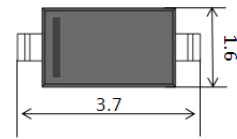
RoHS compliant / Green EMC

Matte Tin (Sn) Lead finish

SOD123 Micro SMD package

Cathode Band / Device marking

SOD123



Device Marking Code

B0520W	SD
B0530W	SE
B0540W	SF

Maximum Ratings (Ta = 25 °C)

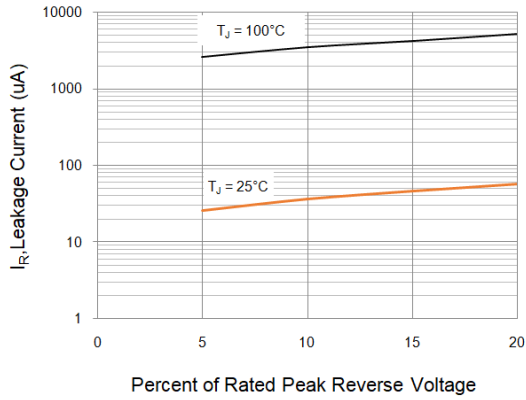
Symbol	Parameter	Value			Units
V_{RRM}	Maximum recurrent peak reverse voltage	20	30	40	V
V_{RMS}		14	21	28	
I_O	Continuous Forward Current	0.5			A
I_{FSM}	Non-repetitive Peak Forward Surge Current*1	5.5			A
P_D	Power Dissipation	410			mW
T_{STG}	Storage Temperature	-65 to +150			°C

*1 8.3 ms single half sine-wave

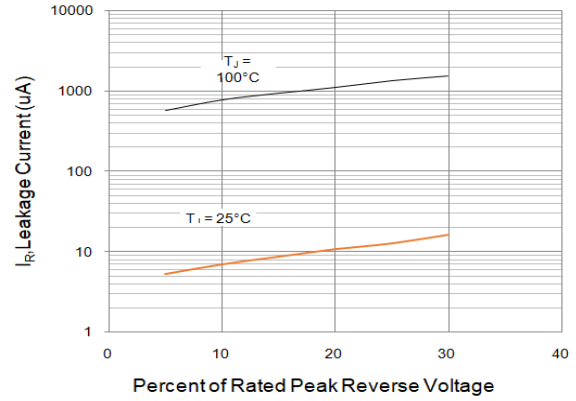
Electrical Characteristics (Ta = 25 °C)

Device	Symbol	Parameter	Conditions	Min	Typ	Max	Units
B0520W	V_F	Forward Voltage	$I_F = 0.1A$			0.3	V
			$I_F = 0.5A$			0.385	
B0530W			$I_F = 0.1A$			0.375	
			$I_F = 0.5A$			0.43	
B0540W			$I_F = 0.5A$			0.51	
			$I_F = 1.0A$			0.62	
B0520W	I_R	Reverse Current	$V_R = 10V$			75	μA
			$V_R = 20V$			250	
B0530W	$V_R = 15V$			20			
	$V_R = 30V$			130			
B0540W	I_R	Reverse Current	$V_R = 20V$			10	μA
			$V_R = 40V$			20	
	$T_J = 100^\circ C, V_R = 40V$			5000			
series	C_T	Capacitance	$V_R = 0V, f = 1MHz$		170		pF

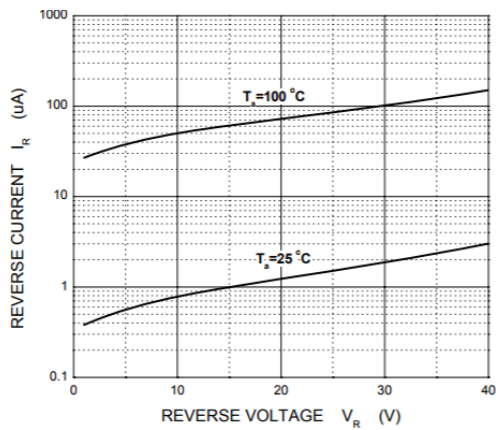
Typical Characteristics



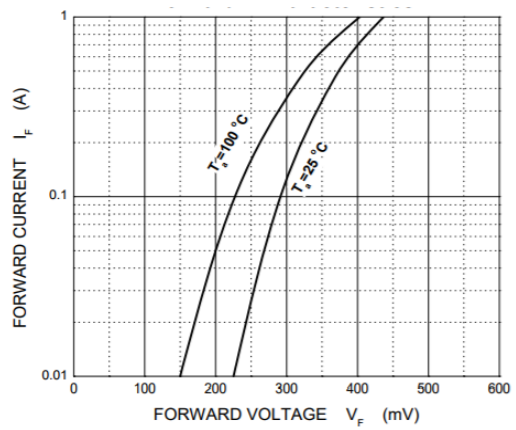
Typical Reverse Current of B0520W



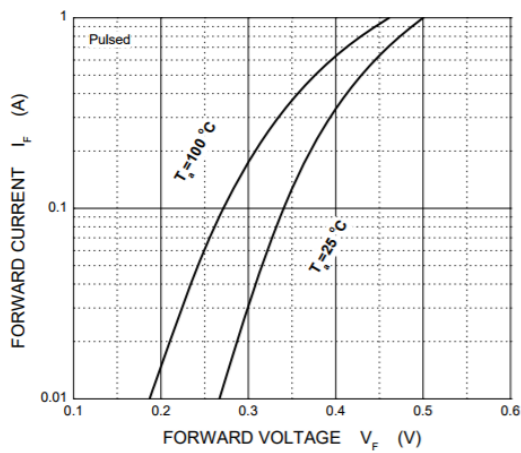
Typical Reverse Current of B0530W



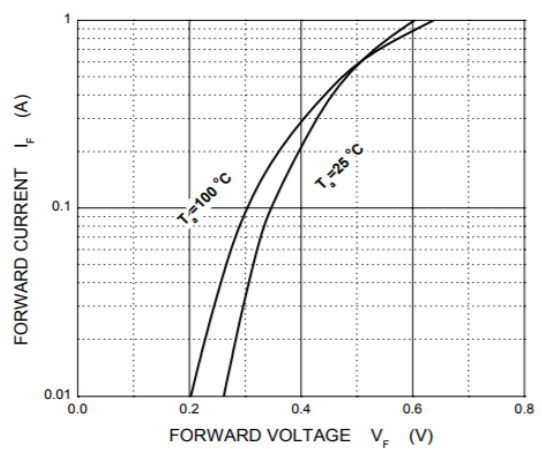
Typical Reverse Current of B0540W



Typical Forward Characteristics of B0520W



Typical Forward Characteristics of B0530W



Typical Forward Characteristics of B0540W

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
B0540W	SOD123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

Package Dimensions

