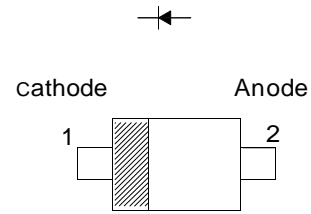




### FEATURES

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

**MARKING: B0520W: SD**  
**B0530W: SE**  
**B0540W: SF**



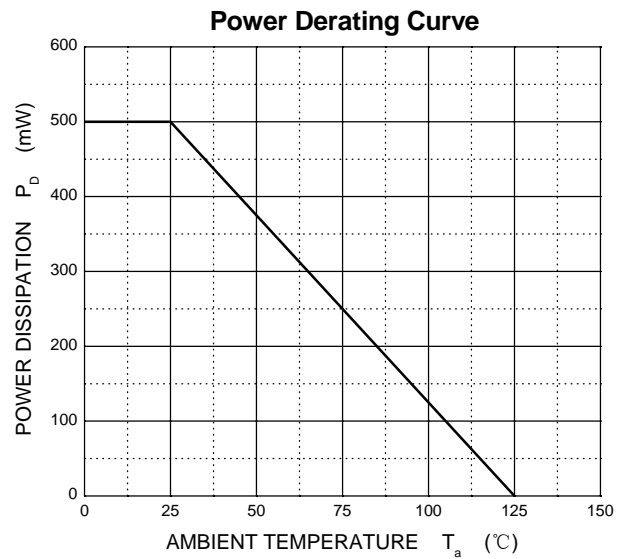
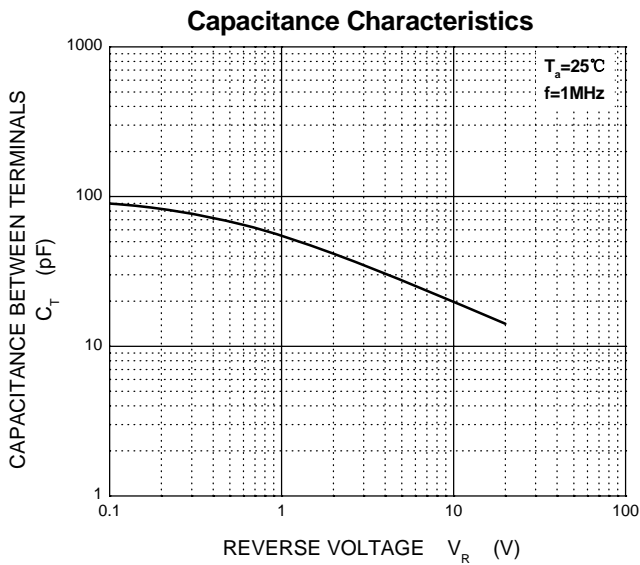
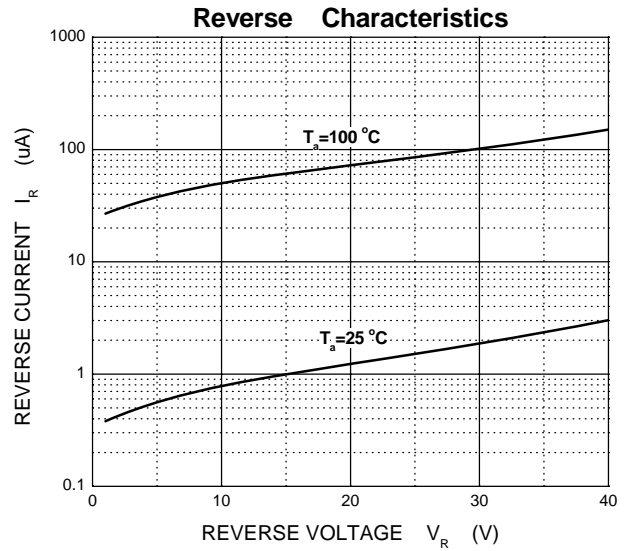
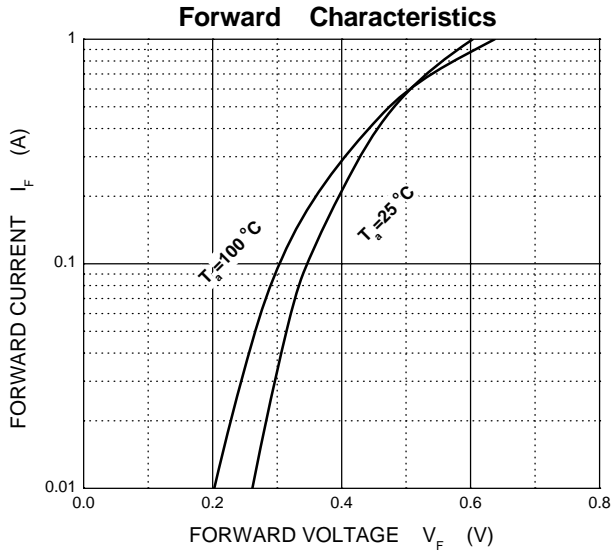
SOD-123

### Maximum Ratings @Ta=25°C

Peak repetitive peak reverse voltage	Symbol	B0520W	B0530W	B0540W	Unit
Working peak reverse voltage	$V_{RRM}$				
DC Blocking voltage	$V_{RWM}$ $V_R$	20	30	40	V
RMS reverse voltage reverse voltage (DC)	$V_{R(RMS)}$	14	20	28	V
Average rectified output current	$I_o$		0.5		A
Forward surge current peak	$I_{FSM}$		5.5		A
Power dissipation	$P_D$		500		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		250		°C/W
Junction temperature	$T_j$		150		°C
Storage temperature	$T_{STG}$		-55~+150		°C
Voltage rate of change	dv/dt		1000		V/μS

### Electrical Characteristics @Ta=25°C

Parameter	Symbol	B0520W	B0530W	B0540W		
Minimum reverse breakdown voltage	$V_{(BR)R}$	20	--	--	V	$I_R=250\ \mu A$
		--	30	--		$I_R=200\ \mu A$
		--	--	40		$I_R=20\ \mu A$
Forward voltage	$V_{F1}$	0.32	0.375	--	V	$I_F=0.1A$
	$V_{F2}$	0.385	0.430	0.510		$I_F=0.5A$
	$V_{F3}$	--	--	0.62		$I_F=1A$
Reverse current	$I_{R1}$	75	--	--	μA	$V_R=10V$
	$I_{R2}$	--	20	--		$V_R=15V$
Reverse current	$I_{R3}$	250	--	10	μA	$V_R=20V$
	$I_{R4}$	--	130	--		$V_R=30V$
	$I_{R5}$	--	--	20		$V_R=40V$
Capacitance between terminals	$C_T$	--	--	170	pF	$V_R=0, f=1MHz$





## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

