

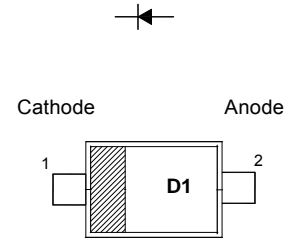


### RB520S-40 Plastic-Encapsulate Diodes

Schottky Barrier Diode

#### FEATURES

- Small surface mounting type
- Low  $I_R$
- High reliability



SOD-523

MARKING: D1

#### Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

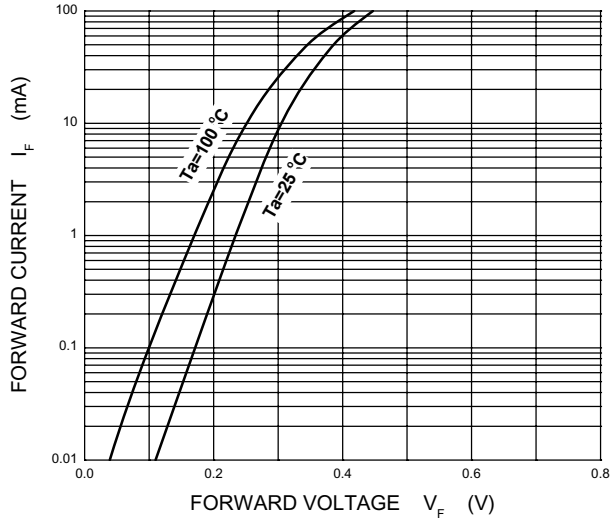
Parameter	Symbol	Limit	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	0.2	A
Non-repetitive peak forward surge current@ $t=8.3\text{ms}$	$I_{FSM}$	1	A
Power Dissipation	$P_D$	150	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	667	$^\circ\text{C}/\text{W}$
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55~+150	

#### Electrical Ratings @ $T_A=25^\circ\text{C}$

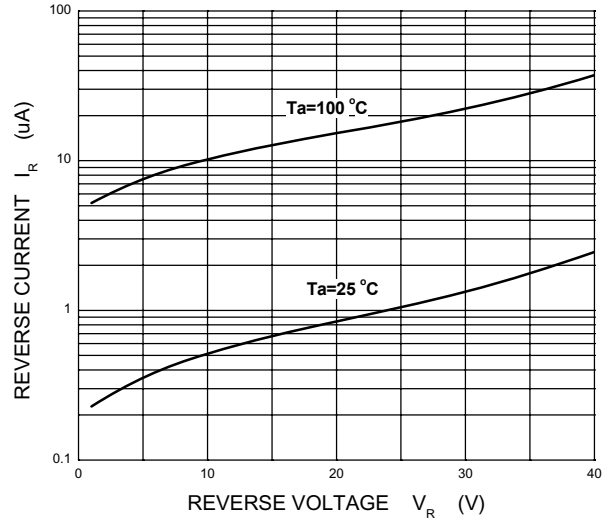
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	$V_F$		0.304 0.446	0.39 0.55	V	$I_F=10\text{mA}$ $I_F=100\text{mA}$
Reverse current	$I_R$		0.605 2.837	1 10	$\mu\text{A}$	$V_R=10\text{V}$ $V_R=40\text{V}$



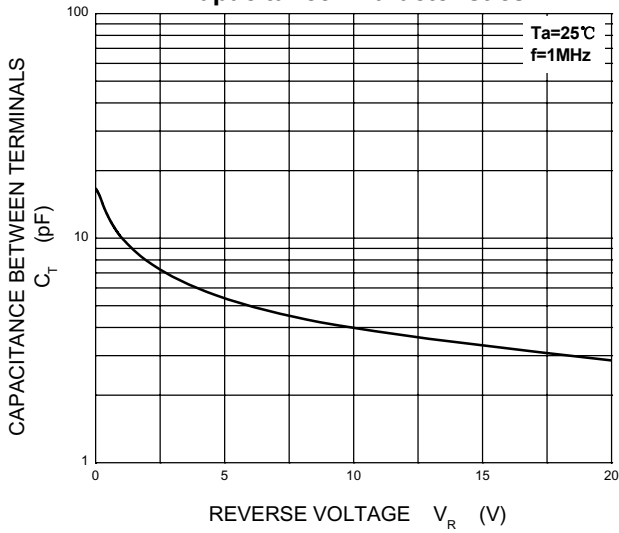
### Forward Characteristics



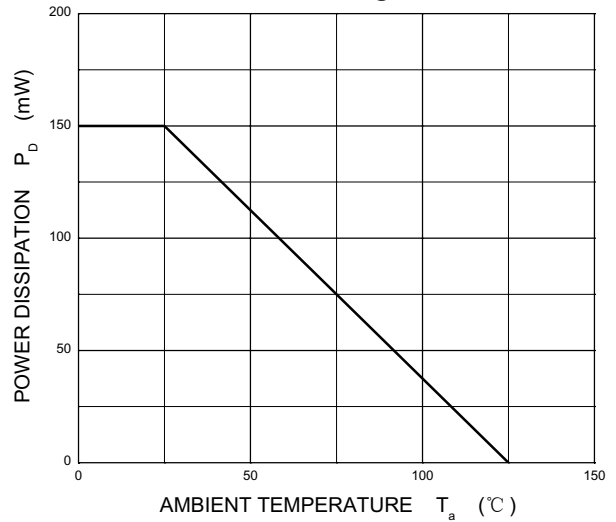
### Reverse Characteristics



### Capacitance Characteristics



### Power Derating Curve

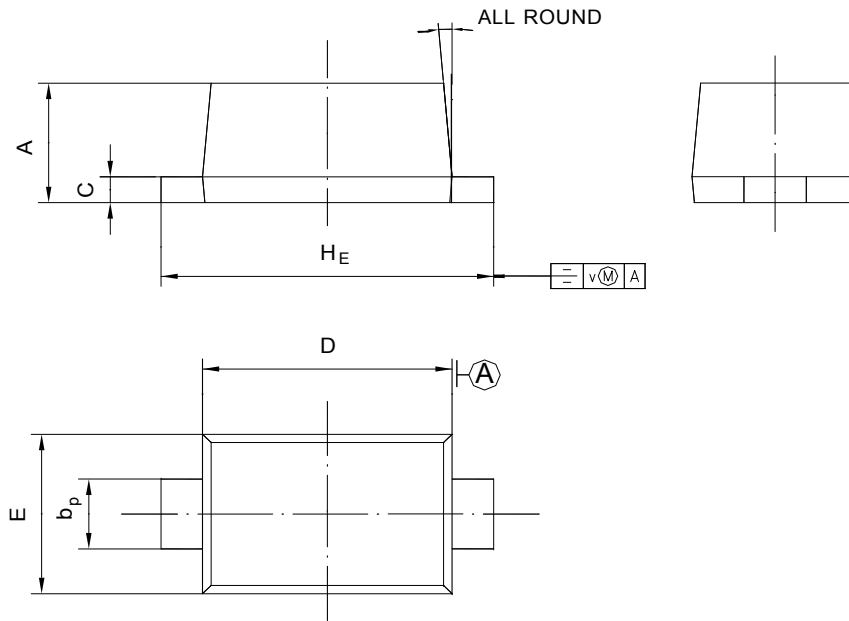




### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	V	∠
mm	0.68	0.4	0.135	1.25	0.85	1.7	0.1	5°
	0.58	0.3	0.100	1.15	0.75	1.5		