

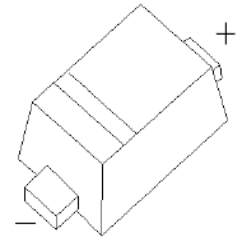
RB520S-40

SOD-523 Plastic-Encapsulate Diodes

Reverse Voltage - 40V Forward Current - 0.2A

FEATURES

- Small surface mounting type
- Low I_R
- High reliability
- Marking : D



SOD-523

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	-40~+125	$^\circ\text{C}$
Storage temperature	T_{STG}	-55~+150	

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

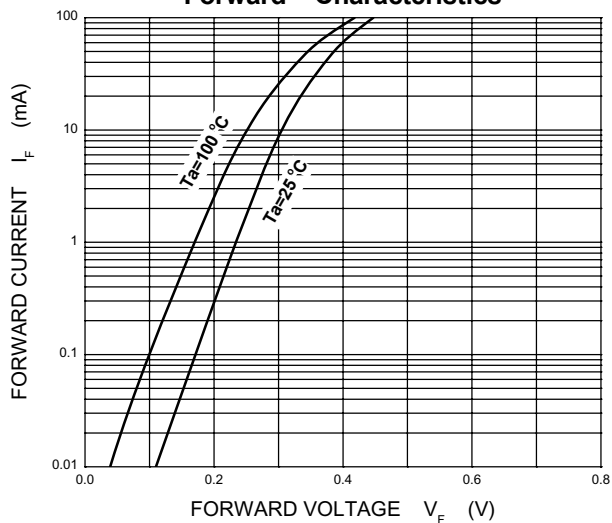
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F		0.304 0.446	0.39 0.55	V	$I_F=10\text{mA}$ $I_F=100\text{mA}$
Reverse current	I_R		0.605 2.837	1 10	μA	$V_R=10\text{V}$ $V_R=40\text{V}$



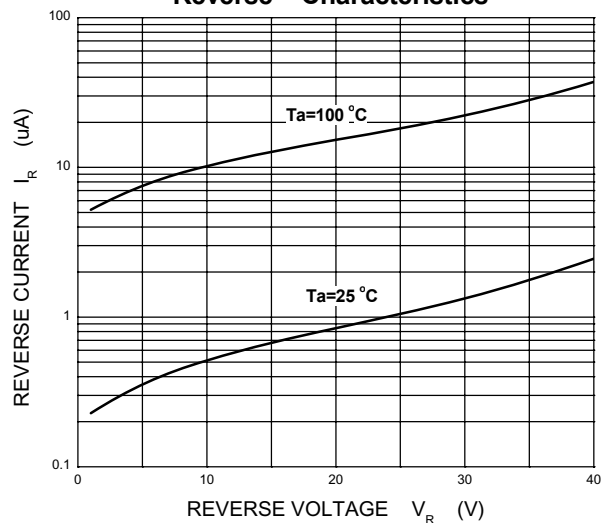
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Typical Characteristics

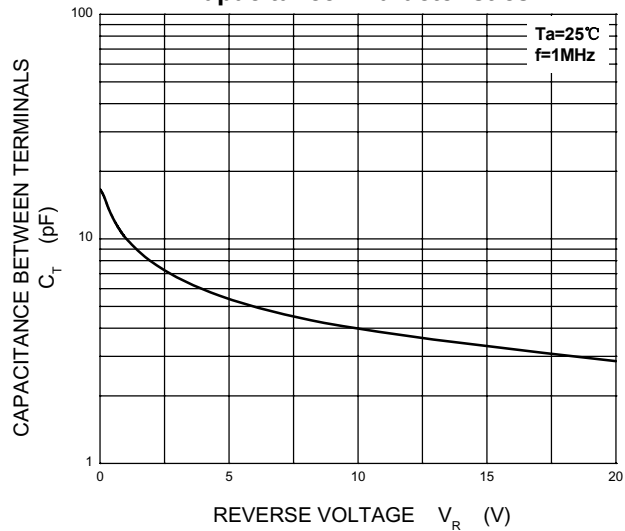
Forward Characteristics



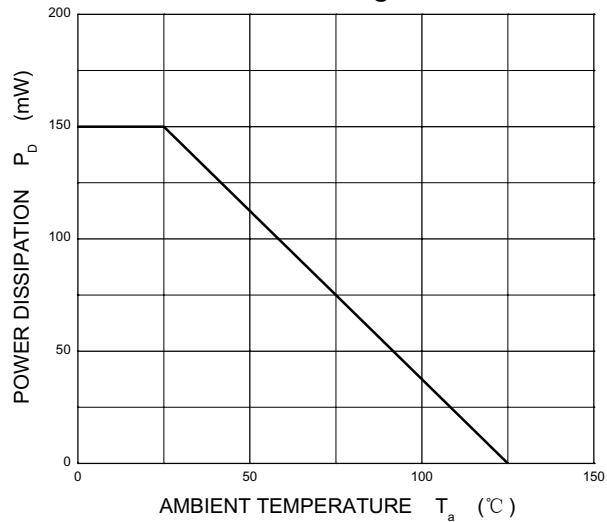
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



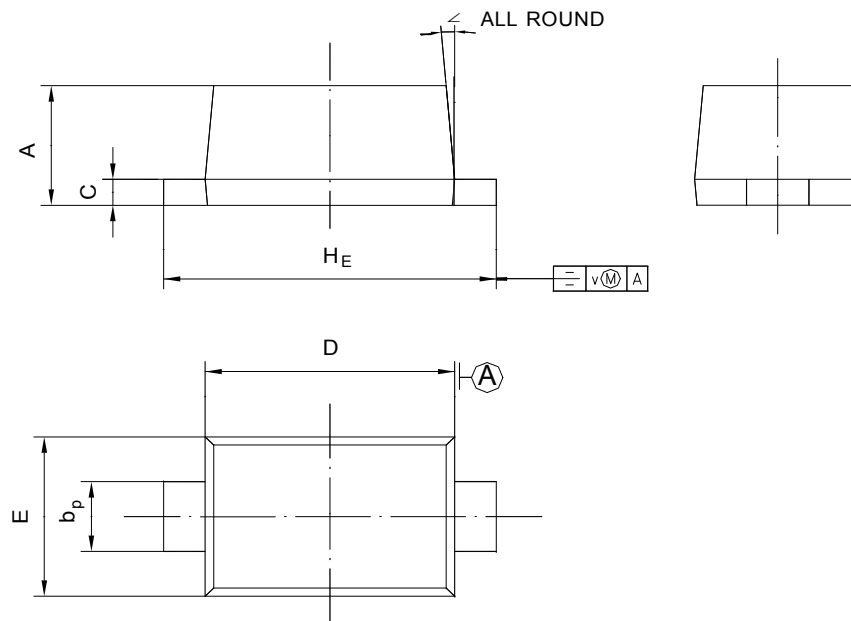


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°