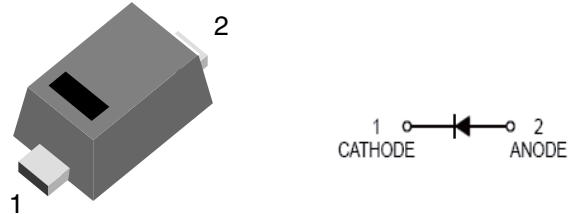


Schottky Barrier Diode in SOD-523

Features

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability



Mechanical Data

- **Case:** SOD-523 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Low current rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

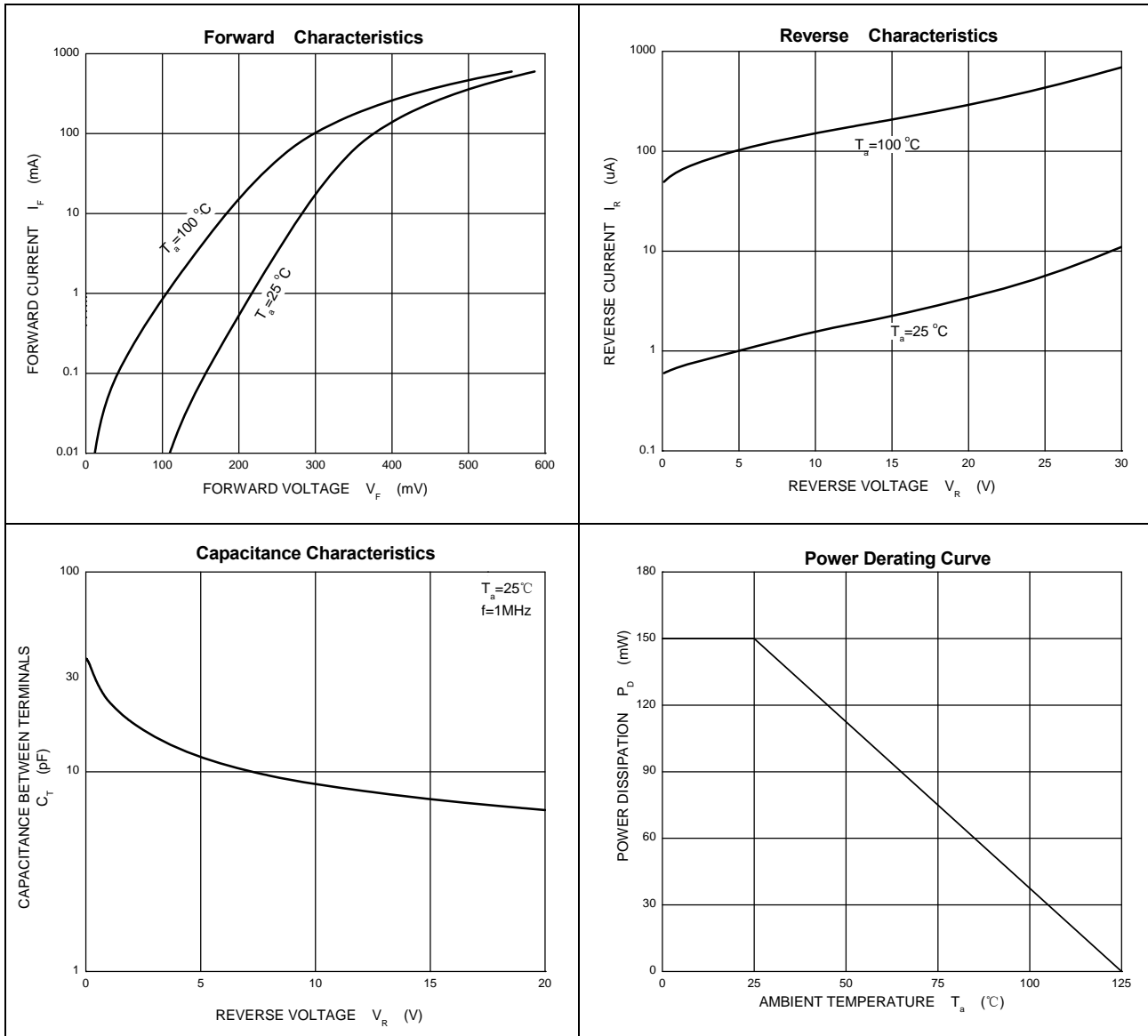
Parameter	Symbol	Limit	Unit
DC reverse voltage	V_R	30	V
Mean rectifying current	I_O	200	mA
Non-repetitive Peak forward surge current @ t=8.3ms	I_{FSM}	1	A
Power dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55~+150	°C

Electrical Characteristics

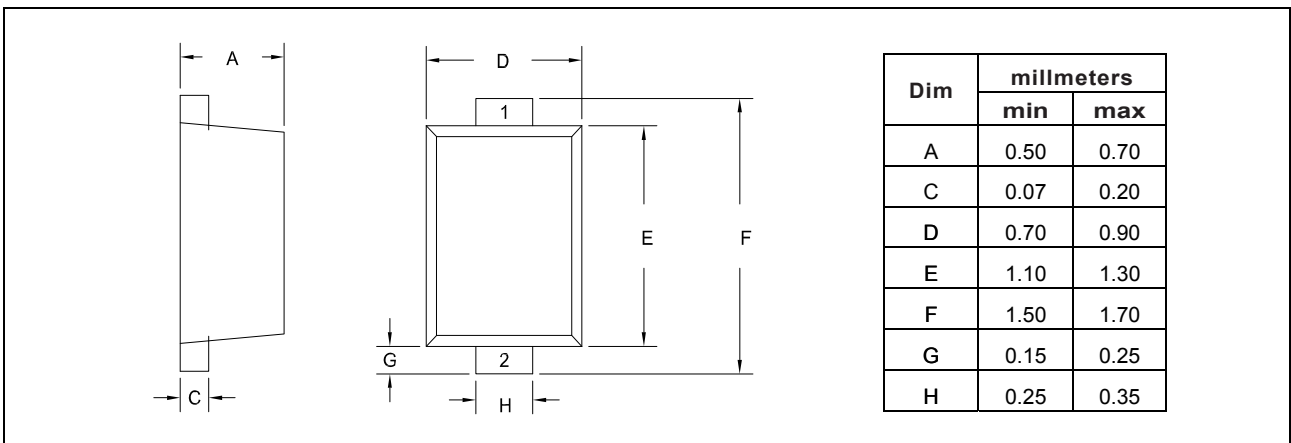
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			0.35	V	$I_F=10\text{mA}$
	V_{F2}			0.5	V	$I_F=200\text{mA}$
Reverse current	I_R			30	μA	$V_R=10\text{V}$

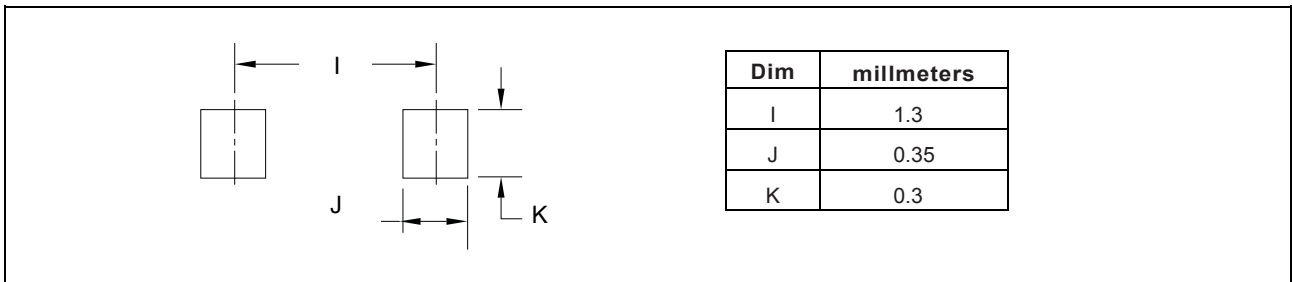
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



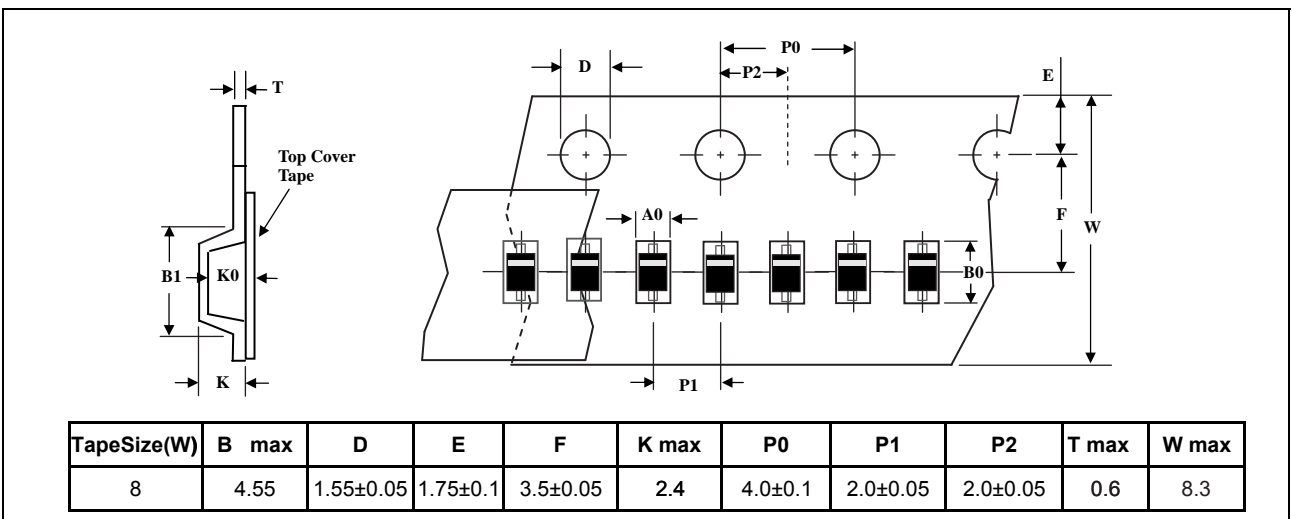
Package Dimensions



PAD Dimensions



Package Information



Note: 1. unit : mm

2. A0, B0, and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05mm min to 0.50 mm max. The component cannot rotate more than 10° within the determined cavity.

Marking



Ordering information

Order code	Package	Net Weight	Packaging option	Base quantity	Packaging specification
CSB5D521S-30	SOD-523	0.002g	Tape and reel	8000pcs / Reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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