CASD501S2

Surface Mount Small Signal Schottky Barrier Diodes

Features

- For surface mounted application
- Extremely low V_F
- Extremely Thin Package
- Low Stored Charge
- Majority Carrier Conduction

Mechanical Data

- Case: Molded Plastic, JEDEC SOD-323.
- Terminals: Solder plated, solderable per MIL-STD-750 Method 2026
- Polarity: Indicated by cathode band.
- Mounting Position : Any.
- Weight: 0.0045 gram, 0.000159 ounce

Maximum Ratings (Ta=25℃, unless otherwise noted)

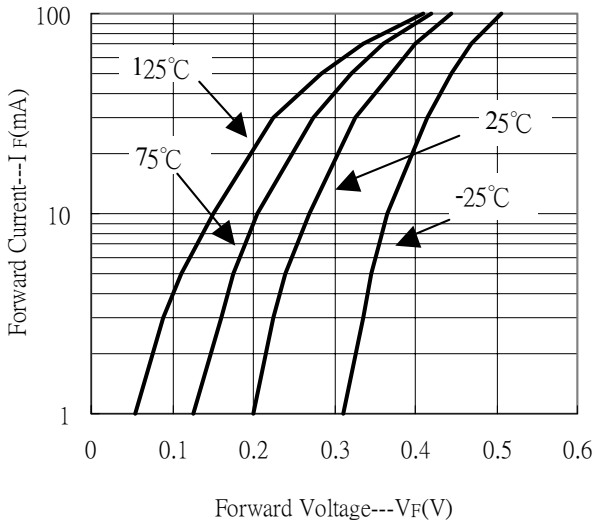
Parameter	Symbol	Conditions	min	typ	max	unit
Repetitive Peak Reverse Voltage	V_{RM}				45	V
Continuous Reverse Voltage	V_R				40	V
Average Rectified Current	I_O				100	mA
Peak Forward Surge Current	I_{FSM}	8.3ms single half sine-wave superimposed on rated load (JEDEC method)		1000		mA
Typical Junction Capacitance	C_D	f = 1MHz and applied 10VDC Reverse Voltage		20		pF
Operating Temperature Range	T_J		-40		+125	°C
Storage Temperature Range	T_{STG}		-40		+125	°C

Electrical Characteristics (Ta=25℃, unless otherwise noted)

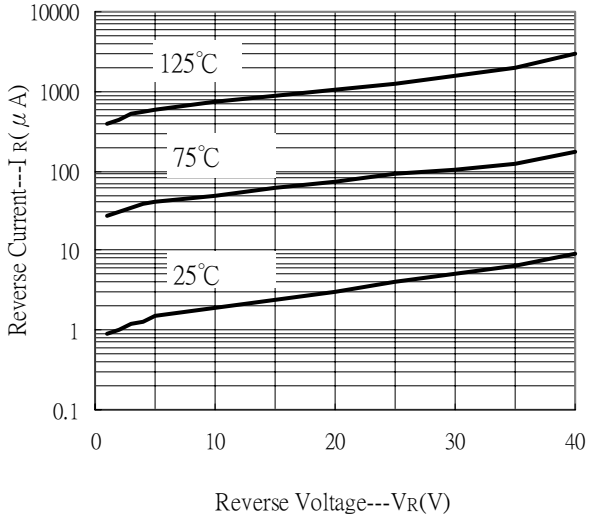
Parameter	Symbol	Conditions	min	typ	max	unit
Forward Voltage	V_F	I_F = 100mA DC			0.55	V
Reverse Leakage Current	I_R	V_R = 10V DC			30	μA

Characteristic Curves

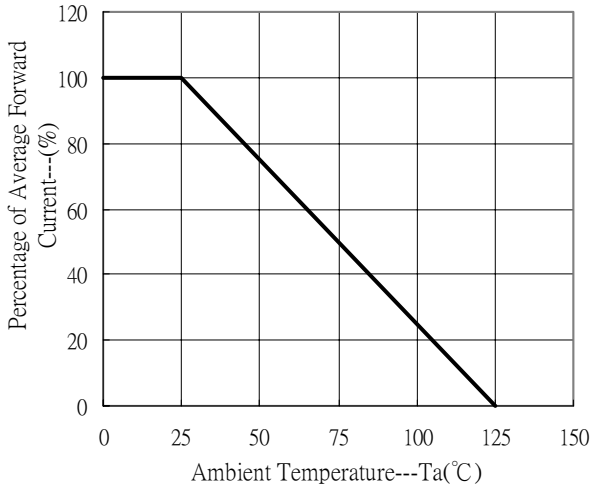
Forward Characteristics



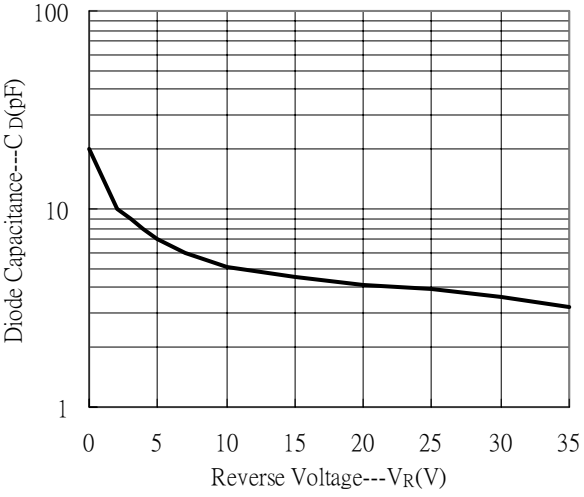
Reverse Characteristics



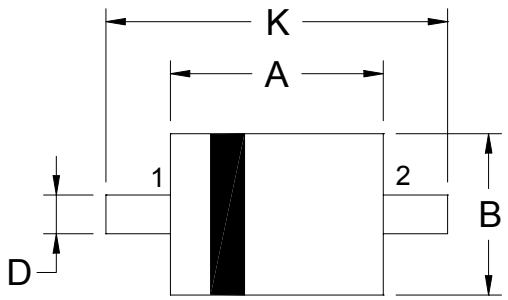
Forward Current Derating Curve
(Mounting on glass epoxy PCBs)

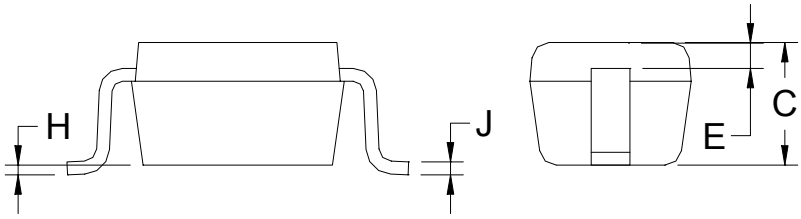


Diode Capacitance vs Reverse Voltage



SOD-323 Dimension





Marking:

Style: Pin 1.Cathode 2.Anode

2-Lead SOD-323 Plastic
Surface Mounted Package
CYStek Package Code: S2

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0630	0.0709	1.60	1.80	E	0.0060	-	0.15	-
B	0.0453	0.0531	1.15	1.35	H	0.0000	0.0040	0.00	0.10
C	0.0315	0.0394	0.80	1.00	J	0.0035	0.0070	0.089	0.177
D	0.0098	0.0157	0.25	0.40	K	0.0906	0.1063	2.30	2.70

Notes: 1.Controlling dimension : millimeters.
2.Lead thickness specified per L/F drawing with solder plating.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0