

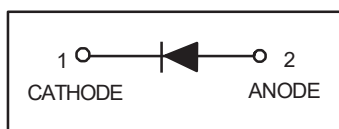
1.0Amp Standard Surface Mounted Rectifiers

Description

Type OVDAX series are 2-pin SOD123FL package 1.0Amp Standard Surface Mounted Rectifiers.

Features

- ✧ Reverse voltage from 50V to 1000V
- ✧ Forward current : 1A
- ✧ Low reverse leakage
- ✧ High forward surge current capability



Circuit Diagram

Applications

- ✧ Circuits for Constant Voltage
- ✧ Constant Current, Waveform clipper
- ✧ Surge absorber



SOD123FL

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	OVD A1	OVD A2	OVD A3	OVD A4	OVD A5	OVD A6	OVD A7	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.0							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	2.0 200							μA
Typical junction capacitance (Note1)	C_J	18.0							pF
Typical thermal resistance	$R_{\theta JA}$	85.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

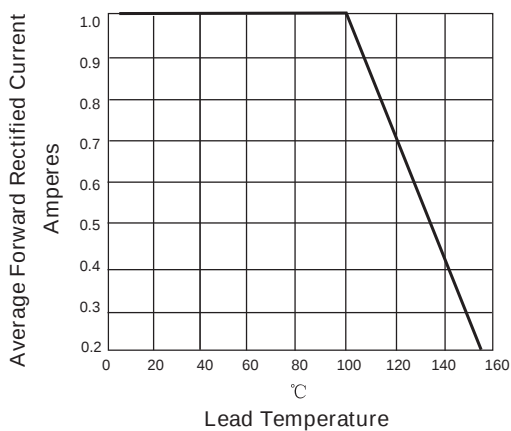


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

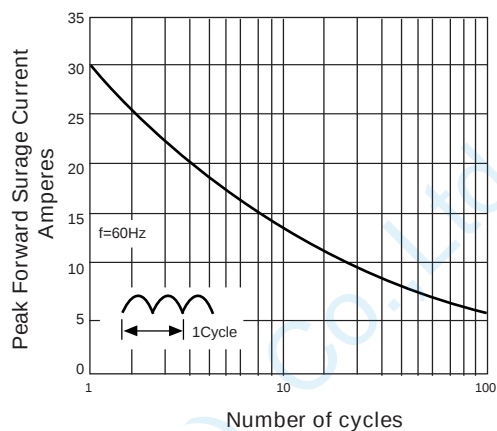


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

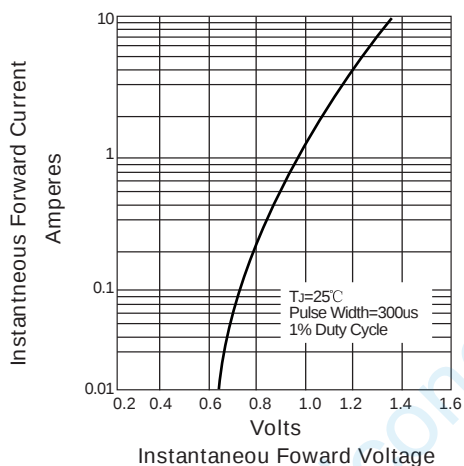
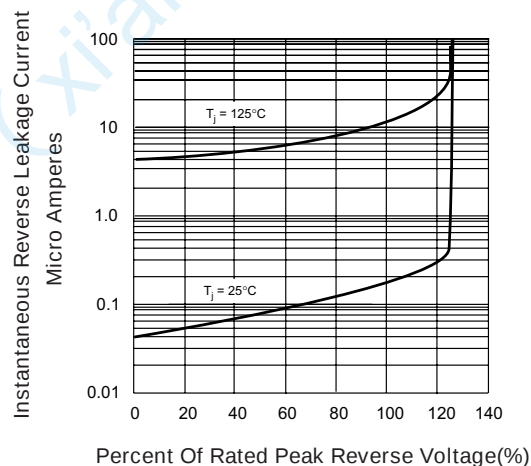
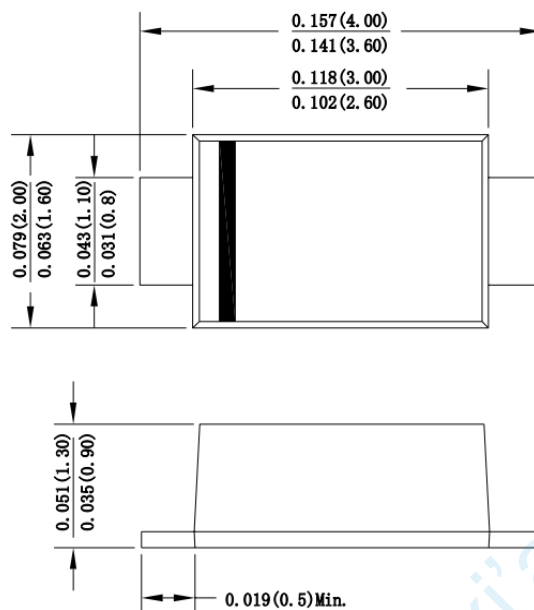


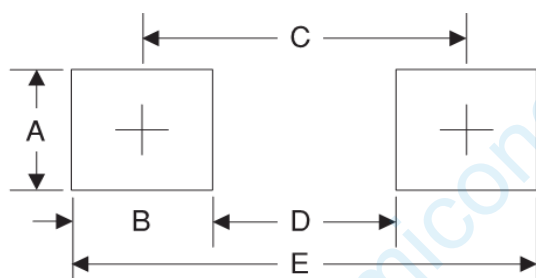
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Information



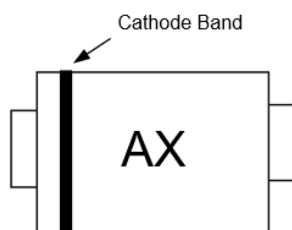
Recommend PCB Layout



Symbol	Unit (mm)	Unit (inch)
A	1.2	0.048
B	1.15	0.045
C	3.10	0.122
D	1.95	0.077
E	4.25	0.167

Notes: This PCB Layout Is For Reference Purposes Only

Marking



X: Voltage Code

- 1 --- VRRM=50V
- 2 --- VRRM=100V
- 3 --- VRRM=200V
- 4 --- VRRM=400V
- 5 --- VRRM=600V
- 6 --- VRRM=800V
- 7 --- VRRM=1000V

Ordering Information

Part number	Material	Type	Reel size	MOQ	MOQ/internal box	MOQ/carton
OVDAX Series	GREEN	T/R	7 inch	3k/reel	5reel= 15k/box	10boxes=150k/carton