Surface Mount Schottky Barrier Rectifier

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CDBW120 THRU CDBW1100

Voltage Range 20 to 100V
Current 1.0 Ampere

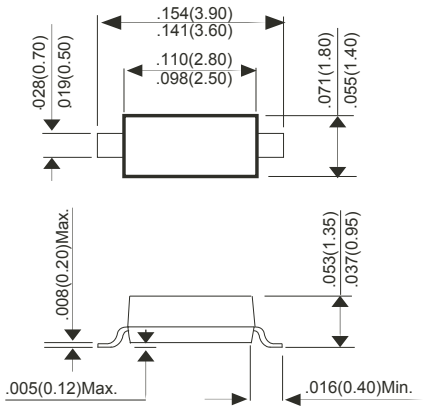
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic SOD-123
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-750 method 2026
- Polarity:Color band denotes cathode end
- Mounting position: Any
- Weight: 0.01 gram

SOD-123



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYBMOL	CDBW120	CDBW140	CDBW160	CDBW180	CDBW1100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	V
Maximum Average Forward Rectified Current T_L=100°C	$I_{(AV)}$	1.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage @ 1.0 A	V_F	0.5		0.7	0.85		V
Maximum DC Reverse Current @T_J=25°C	I_R	0.5					mA
At Rated DC Blocking Voltage @T_J=100°C		10			5.0		
Typical junction Capacitance (Note 1)	C_J	120					pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125 / -55 to +150					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATINGS AND CHARACTERISTIC CURVES CDBW120 THRU CDBW1100

FIG.1 - FORWARD CURRENT DERATING CURVE

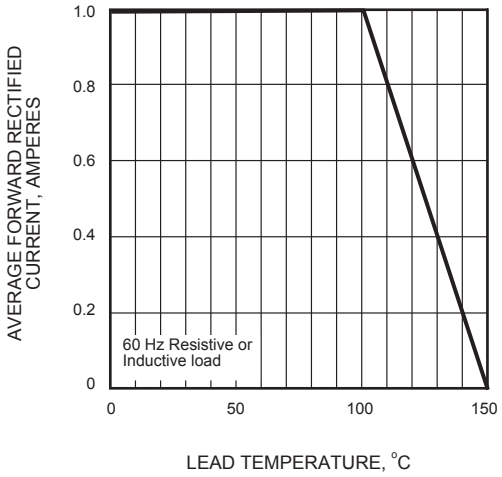


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

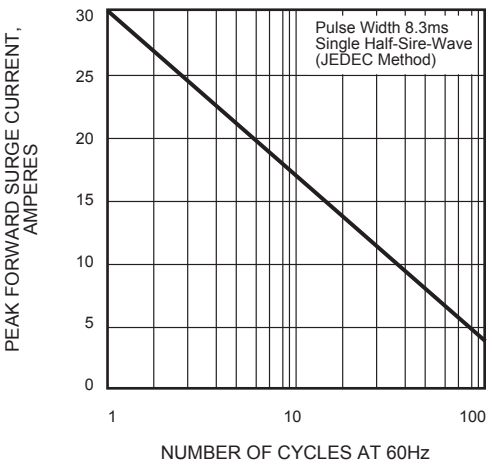


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

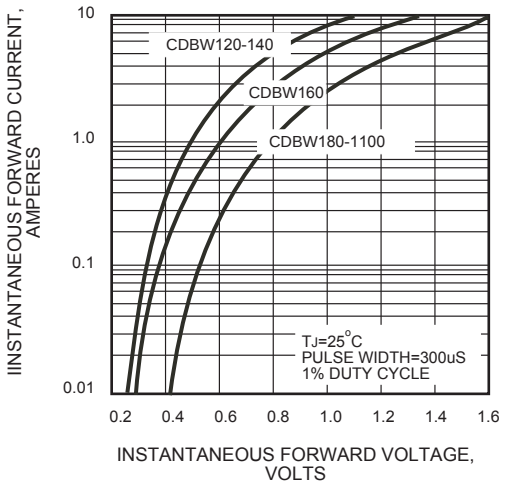


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

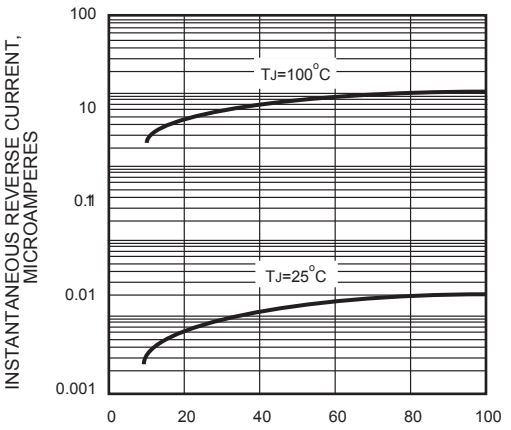


FIG.5 - TYPICAL JUNCTION CAPACITANCE

