

Surface Mount Schottky Barrier Rectifier

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CDBV120 THRU CDBV140

Voltage Range 20 to 40V**Current 1.0 Ampere**

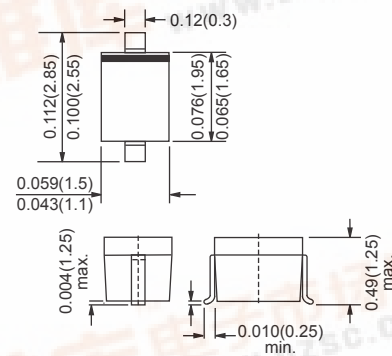
Features

- High current capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- High Temp Soldering : 250°C for 10 seconds at Terminals
- Low Forward Voltage

Mechanical Data

- Case: Molded plastic SOD-323
- Epoxy: UL 94V-0 rate flame retardant
- Solderable per MIL-STD-750 method 2026
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 0.004 gram

SOD-323



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%.

	SYMBOL	CDBV120	CDBV130	CDBV140	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	V
Reverse Voltage	VR	20	30	40	V
Maximum Average Forward Current @ TJ=90°C	IO	1.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	5			A
Maximum Instantaneous Forward Voltage@ IFM1.0 A	VF	0.45	0.55	0.6	V
Maximum Instantaneous Forward Voltage@ IFM3.0 A		0.75	0.875	0.9	
Maximum DC Reverse Current @TJ=25°C VR=30V	IR	1.0			mA
Typical Junction Capacitance (Note)	CT	120			pF
Operating Junction and Storage Temperature Range	TJ, TSTG	-50 to +150 / -65 to +175			°C

NOTES: (1) Measured at 1.0 MHz and applied reverse voltage of 5.0V D.C.
(2) Thermal Resistance Junction to Case.



RATINGS AND CHARACTERISTIC CURVES CDBV120 THRU CDBV140

FIG.1 - FORWARD CURRENT DERATING CURVE

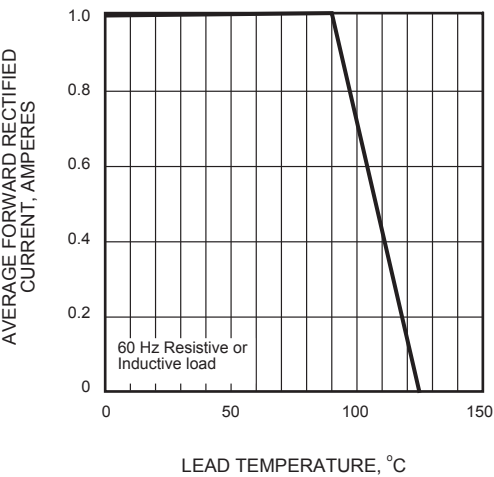


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

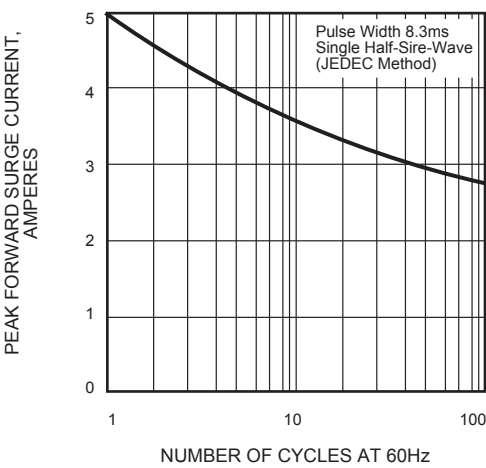


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

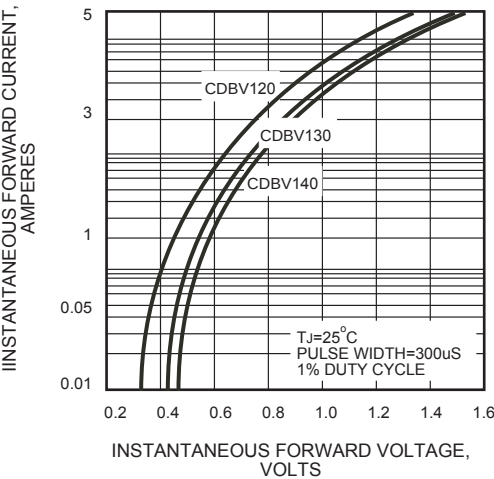


FIG.5 - TYPICAL JUNCTION CAPACITANCE

