



CDBV120 THRU CDBV140

Voltage Range 20 to 40V

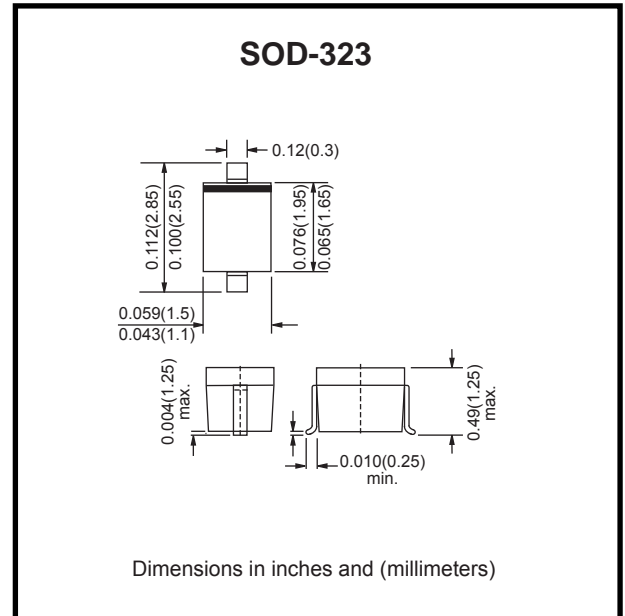
Current 1.0 Ampere

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



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	V _{RRM}	20	30	40	V
Reverse Voltage	V _R	20	30	40	V
Maximum Average Forward Current @ T _J =90°C	I _O	1.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	5			A
Maximum Instantaneous Forward Voltage@ I _{FM} 1.0 A	V _F	0.45	0.55	0.6	V
Maximum Instantaneous Forward Voltage@ I _{FM} 3.0 A		0.75	0.875	0.9	
Maximum DC Reverse Current @T _J =25°C V _R =30V	I _R	1.0			mA
Typical Junction Capacitance (Note)	C _T	120			pF
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-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

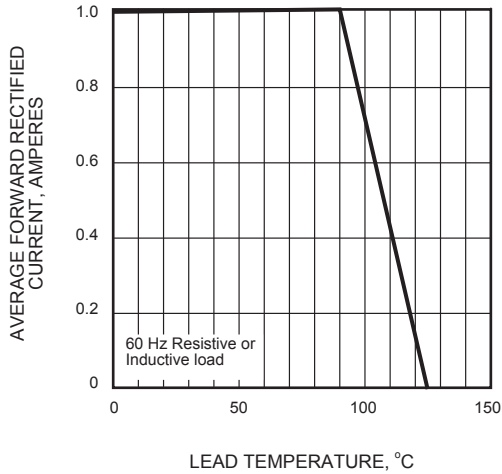


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

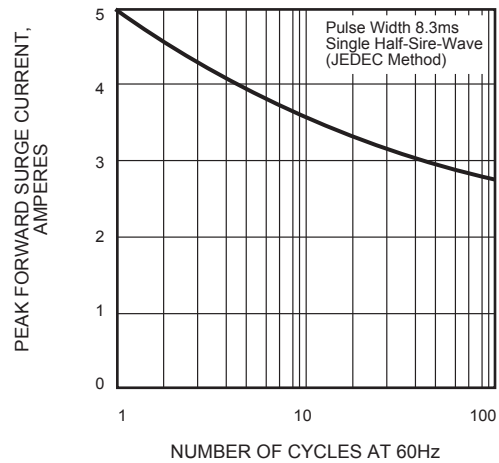


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

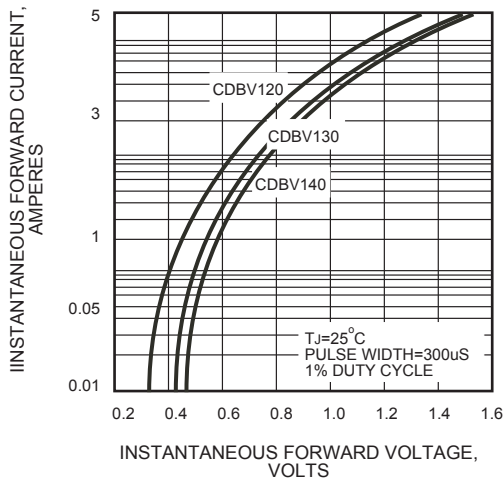


FIG.5 - TYPICAL JUNCTION CAPACITANCE

