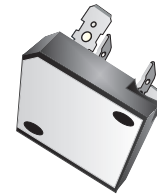


C50VB80-G Thru. C50VB160-G

Reverse Voltage: 800V and 1600V

Forward Current: 50A

RoHS Device

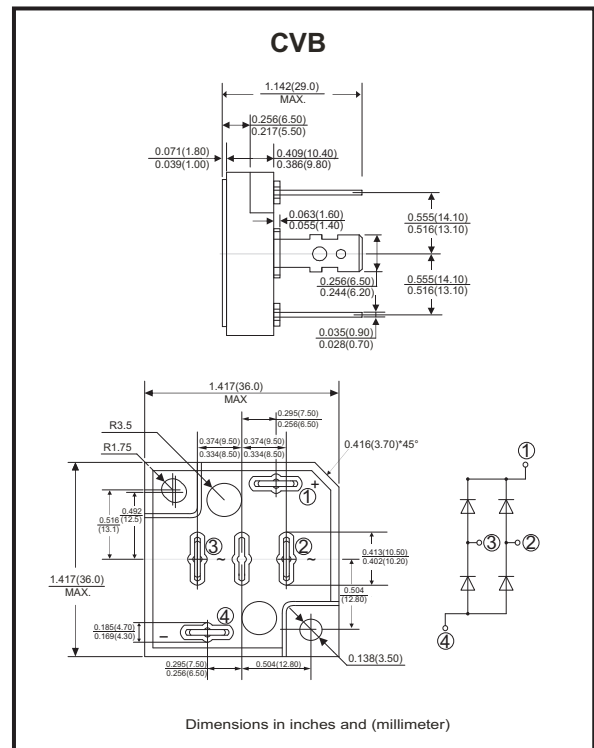


Features

- Surge overload -500 Amperes peak
- Low forward voltage drop
- Materials used carries U/L recognition

Mechanical Data

- Polarit: As marked on Body
- Mounting position: Any
- Weight: 44 grams



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%

Parameter	Symbol	C50VB80-G	C50VB160-G	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	800	1600	V
Maximum RMS Bridge Input Voltage	V _{RMS}	560	1120	V
Maximum Average Forward Rectified Output Current @T _c =55°C	I _(AV)	50		A
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Super Imposed On Rated Load (JEDEC Method)	I _{FSM}	500		A
Current Squared time (1ms ≤ t ≤ 10ms)	I ² t	800		A ² s
Dielectric Strength	V _{dis}	2000		V
Mounting Torque	TOR	0.8		N.m
Maximum Forward Voltage Drop Per Element At 25.0A Peak	V _F	1.05	1.1	V
Maximum Reverse Current At Rated DC Blocking Voltage Per Element @T _A =25°C	I _R	10	100	μA
Typical Thermal Resistance (Note 1)	R _{θJA}	Max: 0.7		°C/W
Operating Temperature Range	T _J	-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150		°C

Notes: 1. Thermal Resistance Junction to case.
2. Company reserves the right to improve product design, functions and reliability without notice.

Rating and Characteristics Curves (C50VB80-G Thru. C50VB160-G)

Fig.1 - Derating Curve Output Rectified Current

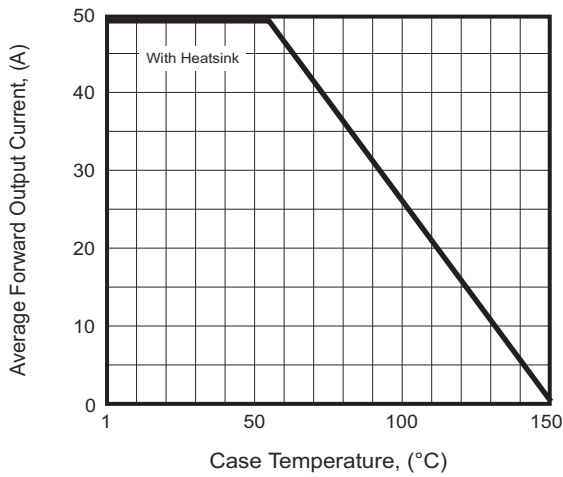


Fig.2 - Typical Forward Characteristics

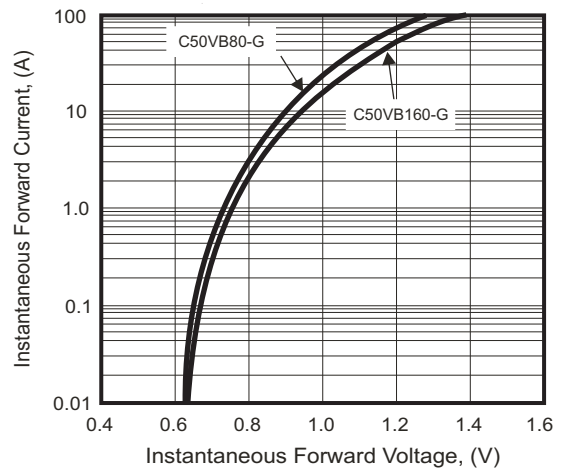


Fig.3 - Maximum Forward Surge Current

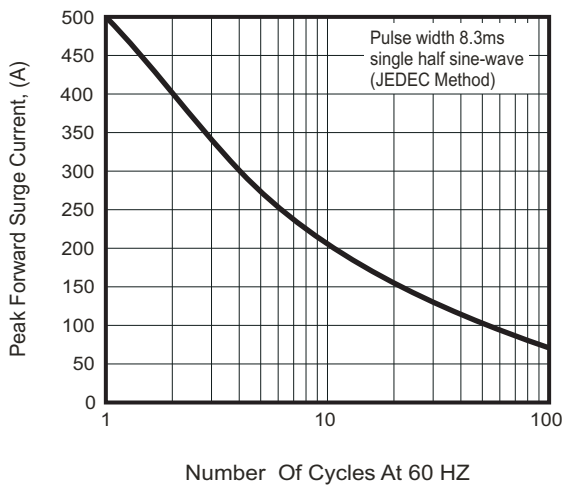
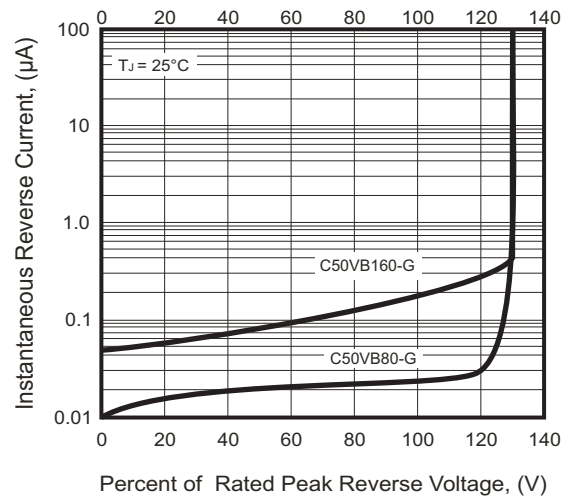
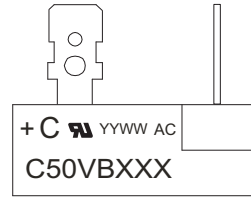


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
C50VB80-G	C50VB80
C50VB160-G	C50VB160



C = Compchip Logo

YY WW

↓ ↘
Weeks of the year
A.D. year latter two figures

XXX = Product type marking code

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
CVB	25	100