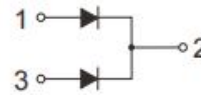


Features

- ◆ High Current Capability
- ◆ High Surge Capability
- ◆ Low Forward Voltage Drop
- ◆ Low Power Loss, High Efficiency

Application

- ◆ Switching Mode Power Supply
- ◆ High-Frequency Inverter
- ◆ Polarity Protection Circuits



1. ANODE
2. CATHODE
3. ANODE



TO-220CB-3L

Maximum Ratings (T_C = 25°C unless otherwise noted)

Symbol	Parameter		Rating	Unit
V _{RRM}	Maximum Recurrent Peak Reverse Voltage		100	V
V _{RWM}	Maximum Working peak reverse voltage		100	V
V _{DC}	Maximum DC blocking Voltage		100	V
V _{RMS}	Maximum RMS Voltage		70	V
I _{F(AV)}	Maximum Average Forward Rectified Current	Per Leg	10.0	A
		Total device	20.0	A
I _{FSM}	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		150	A
R _{θJC}	Maximum Thermal Resistance Per Leg		2.0	°C/W
T _J , T _{STG}	Operating Junction and Storage Temperature Range		-55 to +175	°C

Electrical Characteristics(per leg)

Symbol	Parameter	Test Condition		Min.	Typ.	Max.	Unit
V _{BR}	Reverse Voltage	I _R = 100μA		100	-	-	V
I _R	Reverse Current	V _R = 100V	T _J = 25°C	-	200	500	nA
			T _J = 150°C	-	0.5	-	mA
V _F	Forward Voltage Drop	I _F = 5A	T _J = 25°C	-	0.75	-	V
			T _J = 150°C	-	0.58	-	V
		I _F = 10A	T _J = 25°C	-	0.80	0.85	V
			T _J = 150°C	-	0.66	-	V

Notes:

a. Pulse test: pulse width ≤ 300μs, duty cycle ≤ 2.0%

■ Characteristic Curve

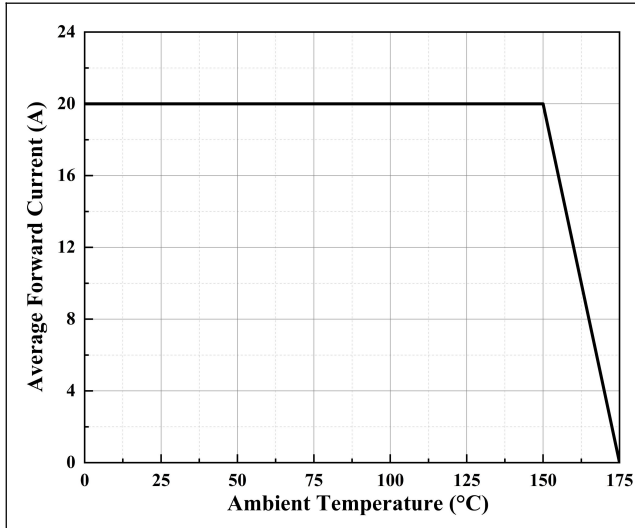


Figure 1. Forward Current Derating Curve

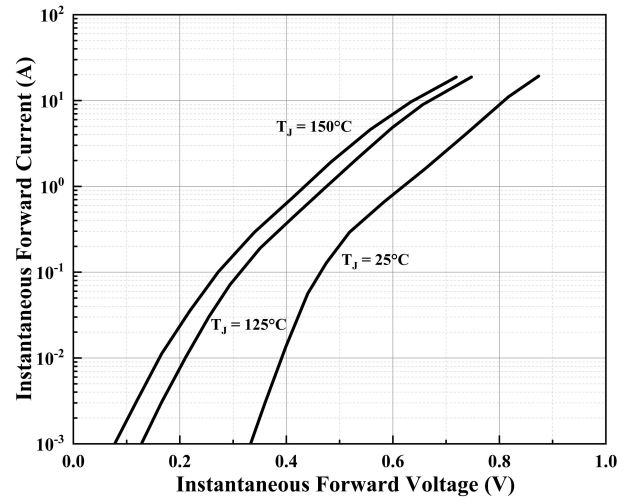


Figure 2. Typical Forward Characteristics Per Diode

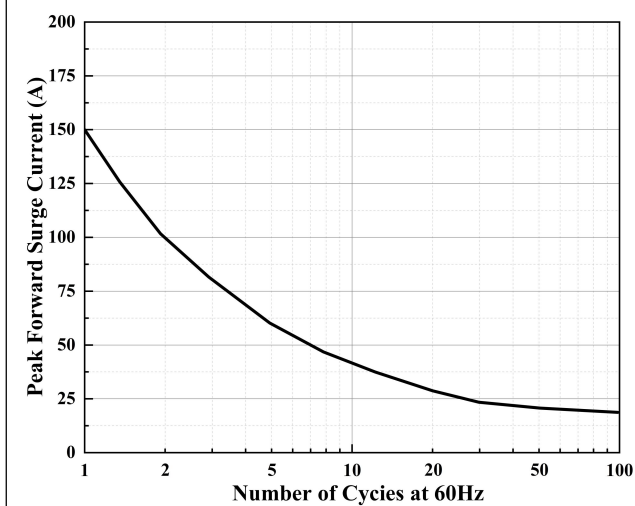


Figure 3. Maximum Non-Repetitive Surge Current

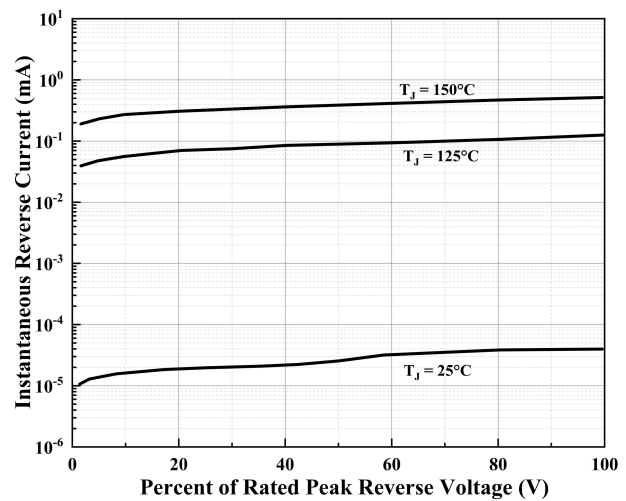
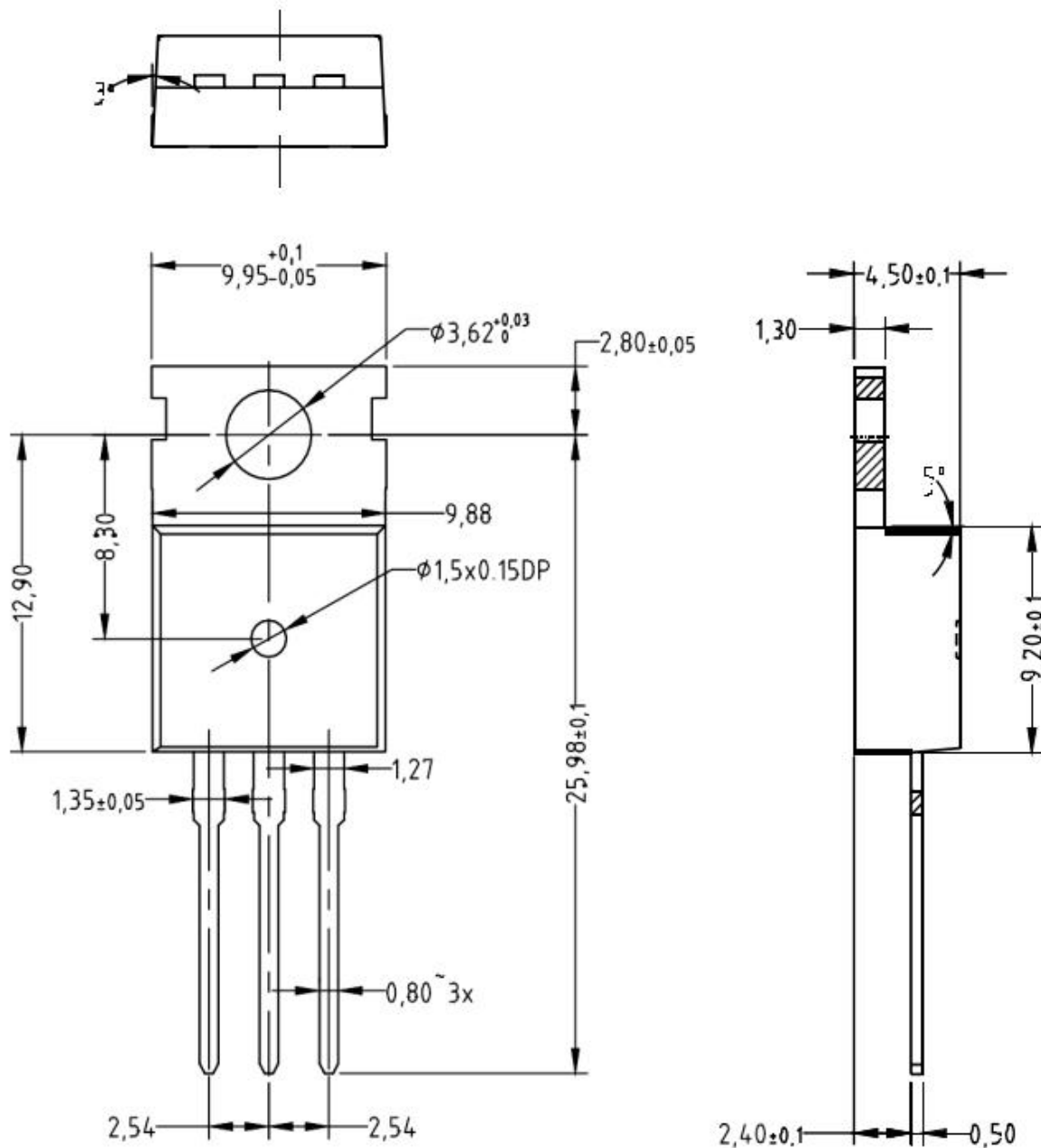


Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information

TO-220CB-3L

Unit:mm





HBR20100CTP

20A Schottky Barrier Rectifiers