

## GEMBR2070CT~20150CT

### SCHOTTKY BARRIER RECTIFIERS

#### REVERSE VOLTAGE 70V TO 150V, CURRENT 20A

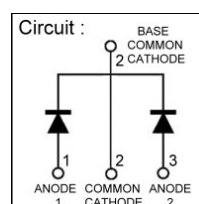
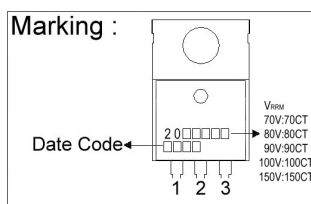
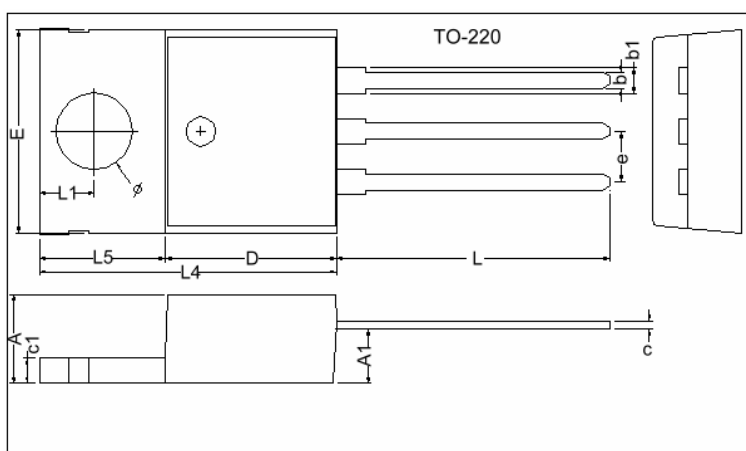
### Description

The GEMBR2070CT~20150CT are designed for use in low voltage, high frequency inverters, free wheeling and polarity protection applications.

### Features

- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity

### Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.80	c1	1.25	1.45
b	0.76	1.00	b1	1.17	1.47
c	0.36	0.50	L	13.25	14.25
D	8.60	9.00	e	2.54 REF.	
E	9.80	10.4	L1	2.60	2.89
L4	14.7	15.3	Ø	3.71	3.96
L5	6.20	6.60	A1	2.60	2.80

### Maximum Ratings and Electrical Characteristics at Ta=25°C unless otherwise specified.

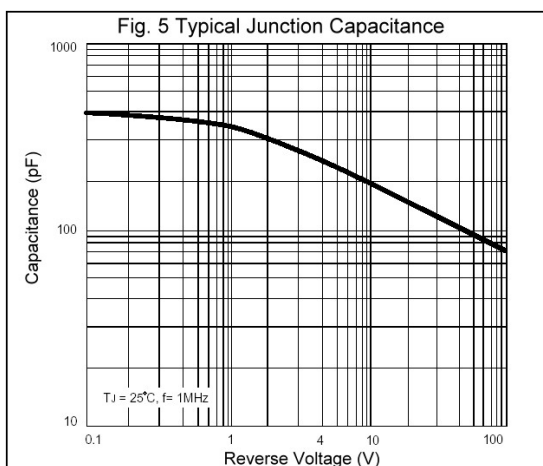
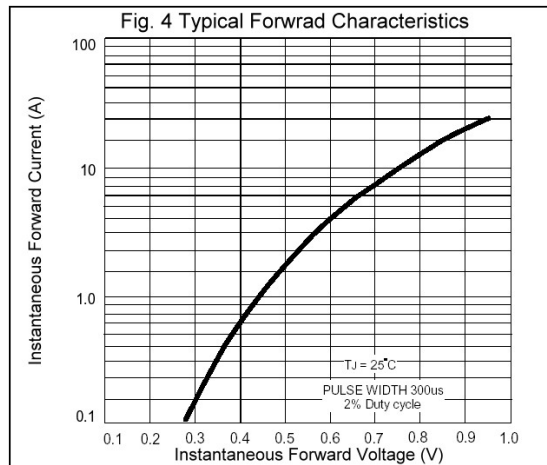
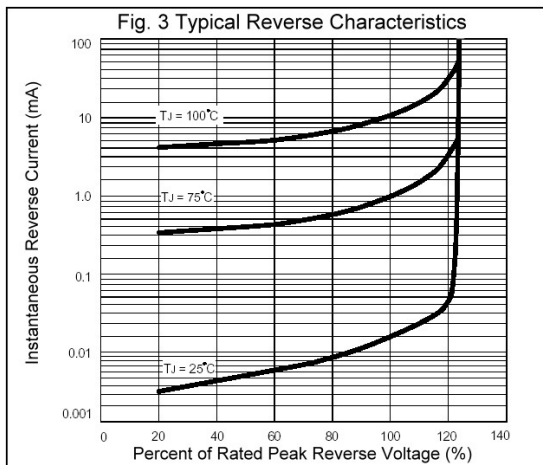
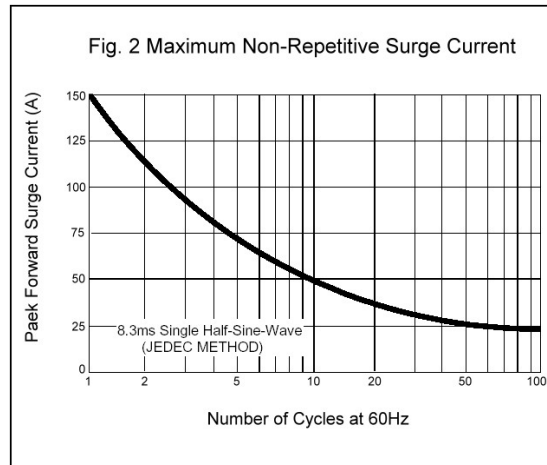
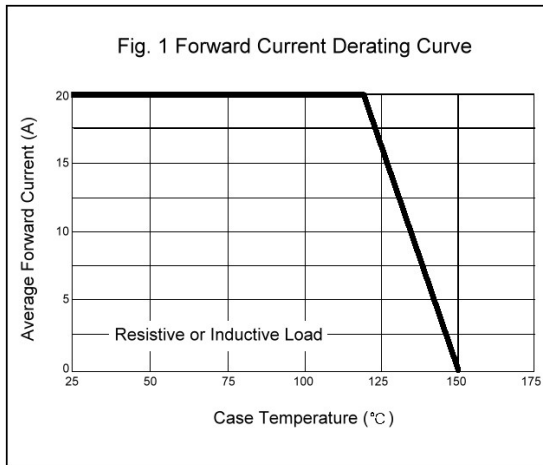
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Parameters	Symbol	Ratings					Unit
		GEMBR 2070CT	GEMBR 2080CT	GEMBR 2090CT	GEMBR 2100CT	GEMBR 2150CT	
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	70	80	90	100	150	V
Max. RMS Voltage	$V_{RMS}$	49	56	63	70	135	V
Max. DC Blocking Voltage	$V_{DC}$	70	80	90	100	150	V
Max. Average Forward Rectified Current (See Fig.1) @ $T_C=120^\circ C$	$I_{(AV)}$	20					A
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	$I_{FSM}$	150					A
Voltage Rate of Charge (Rated VR)	dv/dt	10000					V/us
Max. Forward Voltage (Note 1)	$V_F$	0.75 0.85			0.75 0.92		V
		0.85 0.95			0.86 1.00		
Max. DC Reverse Current At Rated DC Blocking Voltage @ $T_J=125^\circ C$	$I_R$	0.1 100					mA
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0					$^\circ C/W$
Operating Temperature Range	$T_j$	-55 ~ +150					$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ +175					$^\circ C$

Notes: 1. 300us Pulse Width, 2% Duty Cycle.

2. Thermal Resistance Junction to Case.

## Characteristics Curve



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