

## GEMBR2070CT~20150CT

### SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE 70V TO 150V, CURRENT 20A

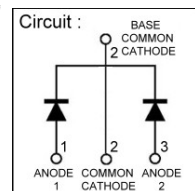
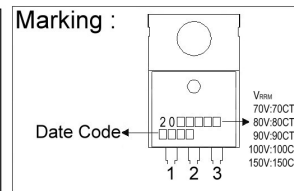
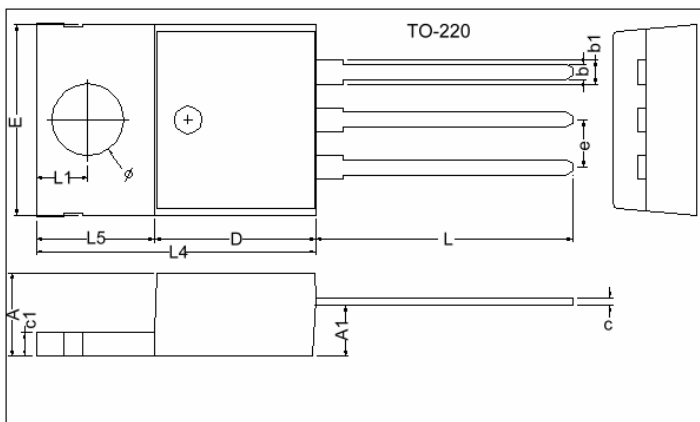
#### Description

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

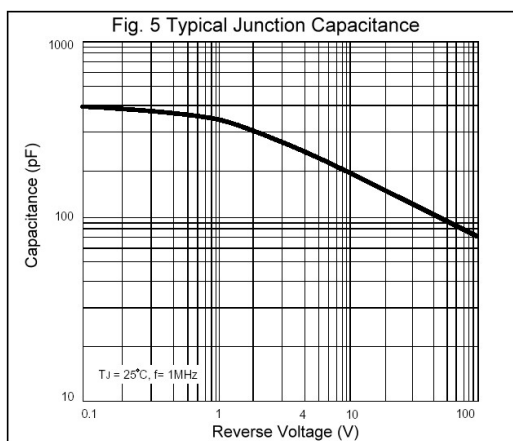
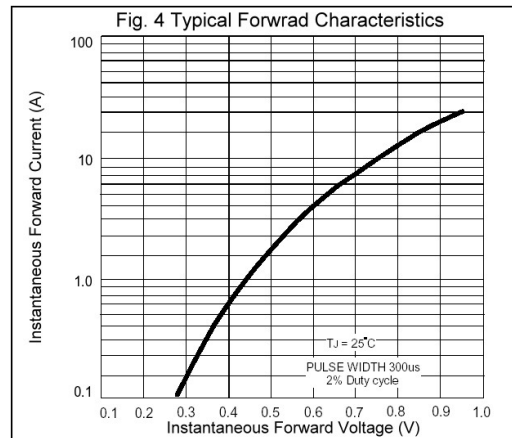
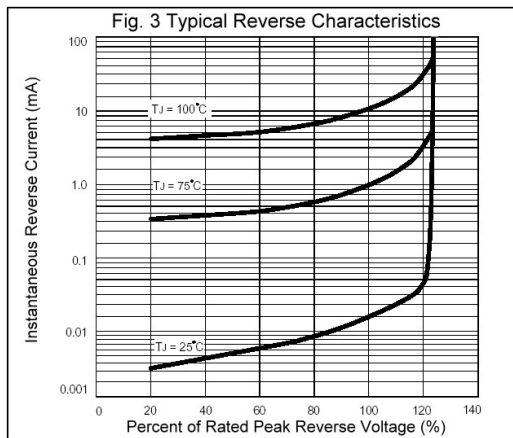
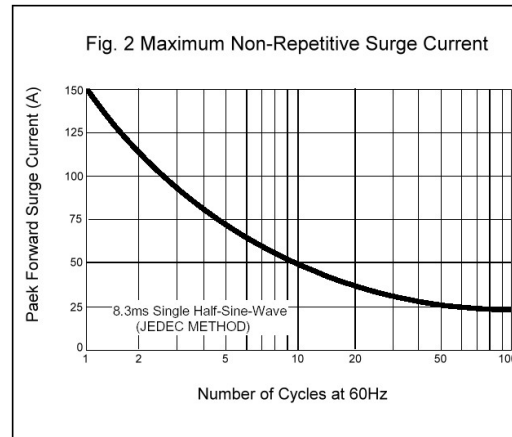
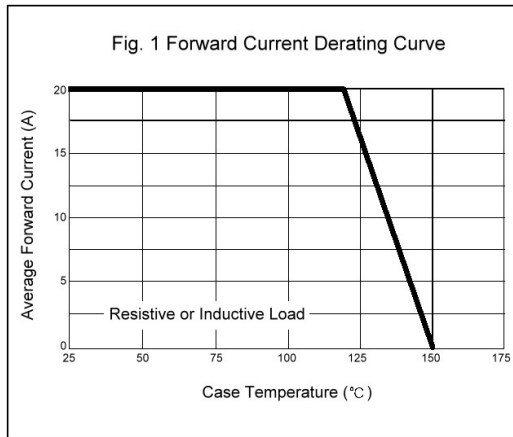
#### Maximum Ratings and Electrical Characteristics at Ta=25°C unless otherwise specified.

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 @T <sub>C</sub> =120°C (See Fig.1)	$I_{(AV)}$	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		0.75		0.75	V
$I_F=10A$ @T <sub>J</sub> =125°C		0.85		0.85		0.92	
$I_F=10A$ @T <sub>J</sub> =25°C		0.85		0.85		0.86	
$I_F=20A$ @T <sub>J</sub> =125°C		0.95		0.95		1.00	
Max. DC Reverse Current At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	$I_R$	0.1					mA
@T <sub>J</sub> =25°C		100					
Typical Thermal Resistance (Note 2)	$R_{θJC}$	2.0					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 ~ +150					°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ +175					°C

Notes: 1. 300us Pulse Width, 2% Duty Cycle.  
2. Thermal Resistance Junction to Case.

## Characteristics Curve



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