

## GESBL1630CT~1660CT

### SCHOTTKY BARRIER RECTIFIERS

#### REVERSE VOLTAGE 30V TO 60V, CURRENT 16A

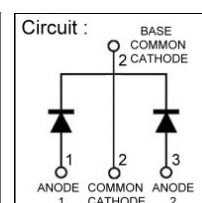
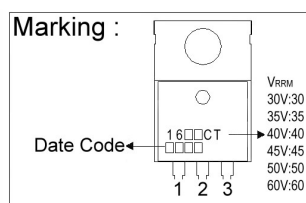
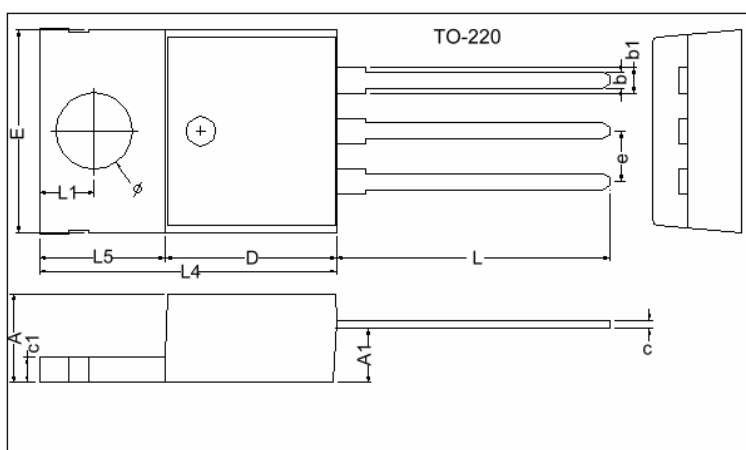
### Description

The GESBL1630CT~1660CT 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  $V_F$
- 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  |

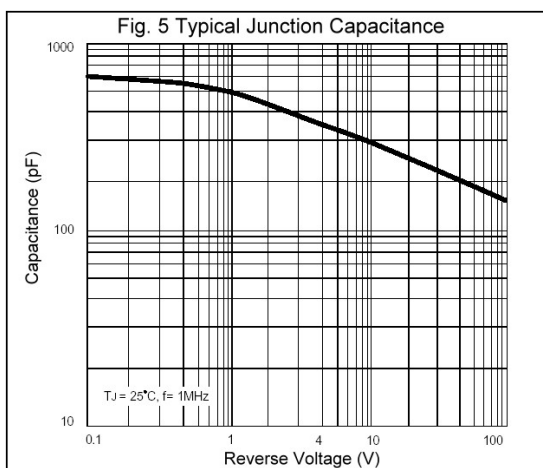
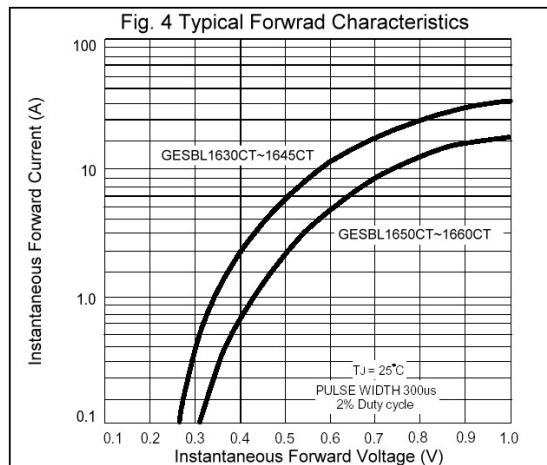
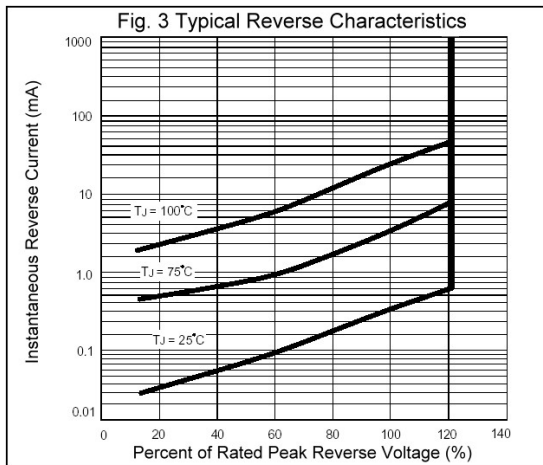
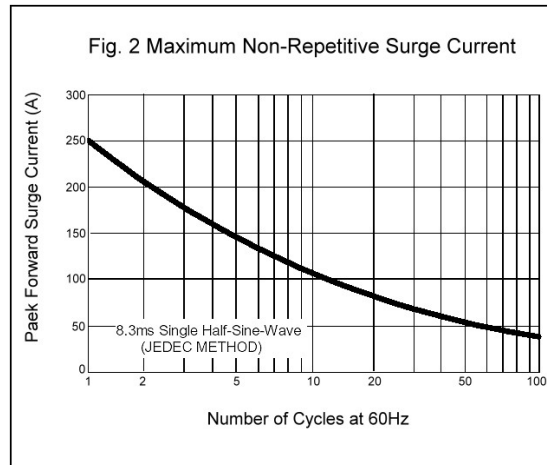
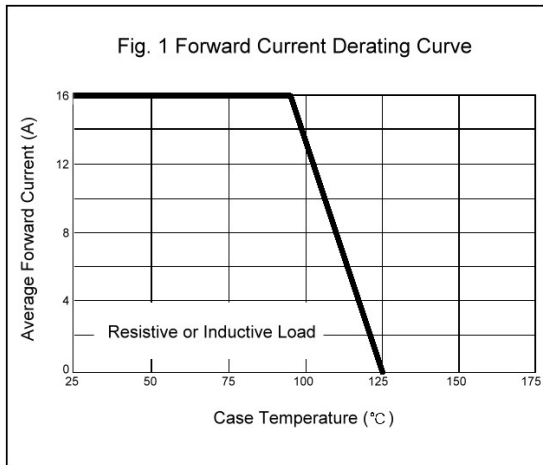
### Maximum Ratings and Electrical Characteristics at $T_a=25^\circ\text{C}$ unless otherwise specified.

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

| Parameters   | Symbol          | Ratings      |              |              |              |              |              | Unit                      |
|--|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------------------|
|  |                 | GESBL 1630CT | GESBL 1635CT | GESBL 1640CT | GESBL 1645CT | GESBL 1650CT | GESBL 1660CT |                           |
| Max. Recurrent Peak Reverse Voltage  | $V_{RRM}$       | 30           | 35           | 40           | 45           | 50           | 60           | V                         |
| Max. RMS Voltage   | $V_{RMS}$       | 21           | 24.5         | 28           | 31.5         | 35           | 42           | V                         |
| Max. DC Blocking Voltage   | $V_{DC}$        | 30           | 35           | 40           | 45           | 50           | 60           | V                         |
| Max. Average Forward Rectified Current (See Fig.1) @ $T_C=95^\circ\text{C}$                                | $I_{(AV)}$      | 16           |              |              |              |              |              | A                         |
| Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)           | $I_{FSM}$       | 250          |              |              |              |              |              | A                         |
| Max. Forward Voltage @ 8A (Note 1)   | $V_F$           | 0.55         |              |              | 0.7          |              |              | V                         |
| Max. DC Reverse Current @ $T_J=25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$ | $I_R$           | 0.5<br>50    |              |              |              |              |              | mA                        |
| Typical Thermal Resistance (Note 2)  | $R_{\theta JC}$ | 2.5          |              |              |              |              |              | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range  | $T_j$           | -55 ~ +125   |              |              |              |              |              | $^\circ\text{C}$          |
| Storage Temperature Range  | $T_{stg}$       | -55 ~ +150   |              |              |              |              |              | $^\circ\text{C}$          |

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

## Characteristics Curve



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