

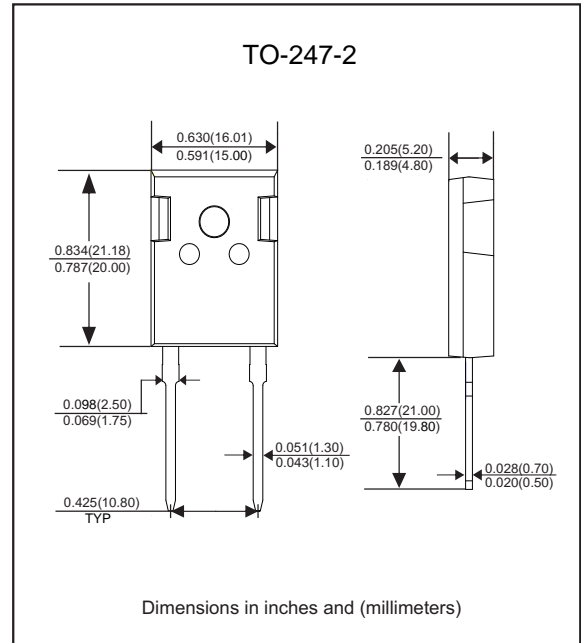
### Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power losses
- Glass passivated chip junction
- Suffix "H" indicates Halogen-free parts

### Mechanical data

- Case: TO-247-2
- Molding compound meets UL94 V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

### Package outline



### Maximum ratings (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit	
Maximum repetitive peak reverse voltage	$V_{RRM}$	2000	V	
Maximum RMS voltage	$V_{RMS}$	1400	V	
Maximum DC blocking voltage	$V_{DC}$	2000	V	
Average forward current at $T_C=90^\circ\text{C}$	$I_{F(AV)}$	90	A	
Peak forward surge current: @60Hz sine wave, 1 cycle	$I_{FSM}$	1100	A	
Current Squared Time ( $1\text{ms} \leq t \leq 8.3\text{ms}$ )	$I^2t$	4185	$\text{A}^2\text{s}$	
Maximum forward voltage @ $I_F=90\text{A}$	$V_F$	1.2	V	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^\circ\text{C}$	5	$\mu\text{A}$
		$T_A=125^\circ\text{C}$	500	$\mu\text{A}$
Operating junction and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^\circ\text{C}$	

### Rating and characteristic curves

Fig. 1 - Current Rating Characteristics

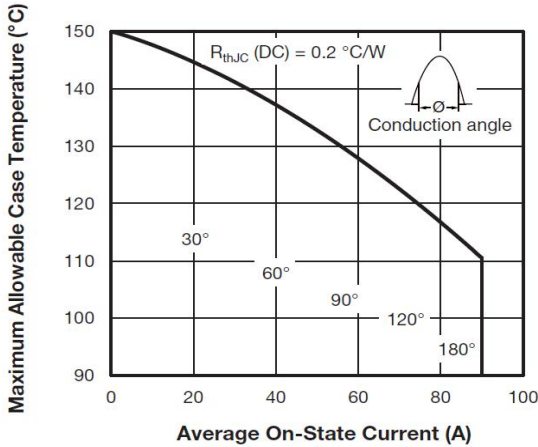


Fig. 2 - Current Rating Characteristics

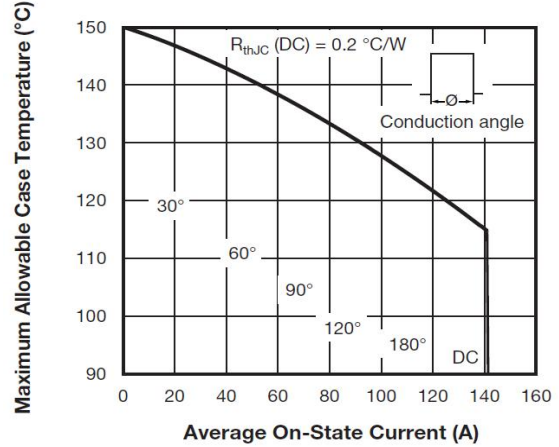


Fig. 3 - Forward Power Loss Characteristics

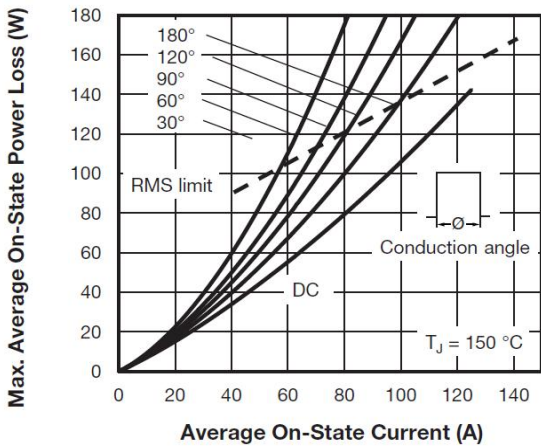


Fig. 4 - Maximum Non-Repetitive Surge Current

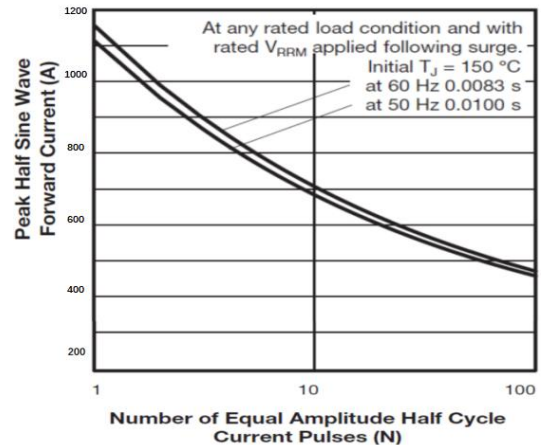


Fig. 5 - Maximum Non-Repetitive Surge Current

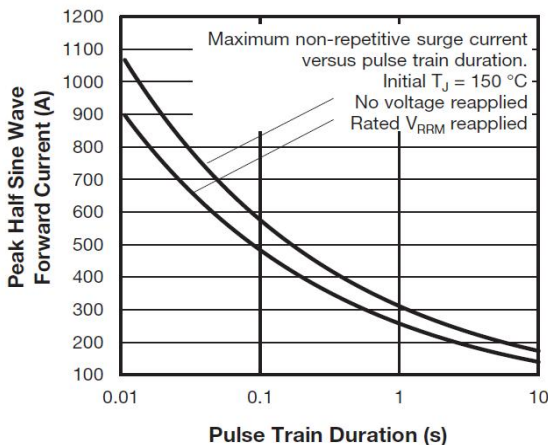
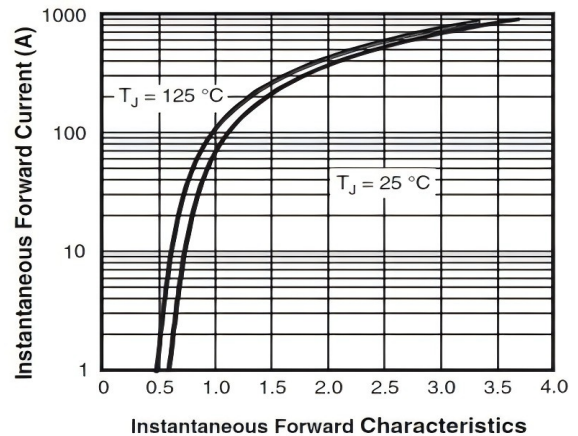
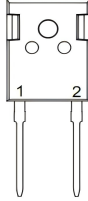
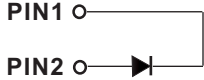


Fig. 6 - Forward Voltage Drop Characteristics



### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Marking

Type number	Marking code
GS90200P	GS90200P