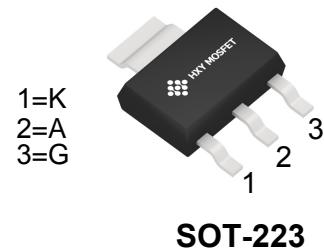




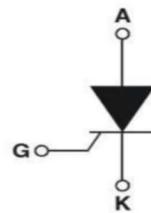
## Description

The BT148W-600R provide high dv/dt rate with strong resistance to electromagnetic interface. They are especially recommended for use on residual current circuit breaker, straight hair, igniter etc.



## Main Features

symbol	value	unit
$I_{T(RMS)}$	0.8	A
$I_{GT}$	90	$\mu A$
$V_{DRM}/V_{RRM}$	600	V



## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40~150	°C
Operating junction temperature range	$T_j$	125	°C
Repetitive peak off-state voltage ( $T_j=25^\circ C$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^\circ C$ )	$V_{RRM}$	600	V
RMS on-state current	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle, $F=50Hz$ )	$I_{TSM}$	8	A

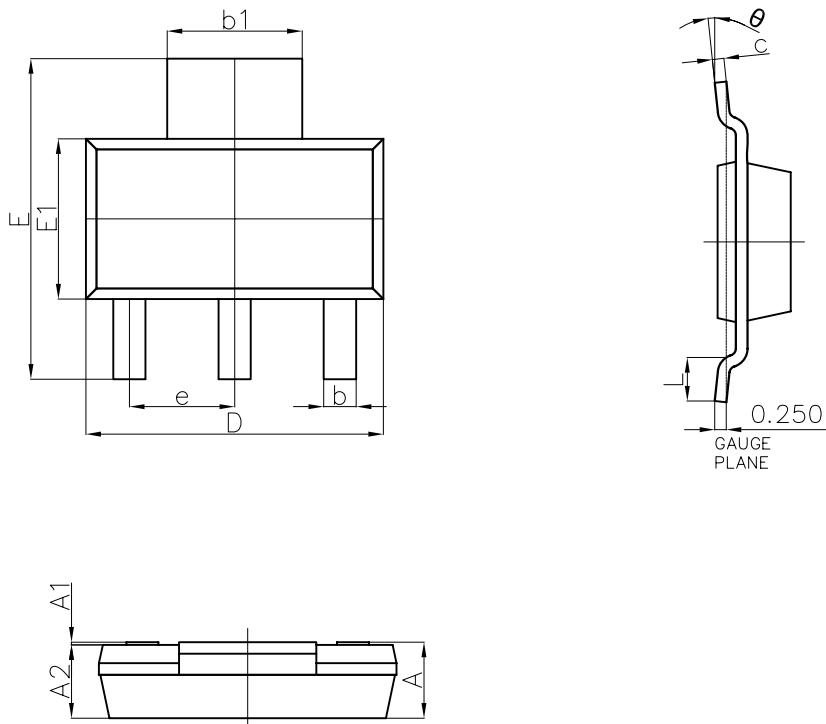


**Electrical Characteristics (T<sub>j</sub>=25°C unless otherwise specified)**

<b>Symbol</b>	<b>Test Condition</b>	<b>Value</b>			<b>Unit</b>
		<b>Min</b>	<b>Typ</b>	<b>Max</b>	
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω	-	-	90	μA
V <sub>GT</sub>		-	-	1	V
V <sub>GD</sub>	V <sub>D</sub> =1/2V <sub>DRM</sub>	0.2	-	-	V
I <sub>H</sub>	I <sub>T</sub> =100mA, R <sub>GK</sub> =1kΩ	-	-	3	mA
dV/dt	V <sub>D</sub> =67%V <sub>DRM</sub> T <sub>j</sub> =110°C R <sub>GK</sub> =1KΩ	20	-	-	V/μs
V <sub>TM</sub>	I <sub>T</sub> =0.8A	-	-	1.6	V
I <sub>DRM</sub> I <sub>RRM</sub>	V <sub>D</sub> =V <sub>DRM</sub> = V <sub>RRM</sub> R <sub>GK</sub> =1kΩ	-	-	0.1	mA



**SOT-223 Package Outline Dimensions**



<b>Symbol</b>	<b>Dimensions In Millimeters</b>		<b>Dimensions In Inches</b>	
	<b>Min.</b>	<b>Max.</b>	<b>Min.</b>	<b>Max.</b>
A	—	1.800	—	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	—	0.030	—
θ	0°	10°	0°	10°



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