

## isc Thyristors

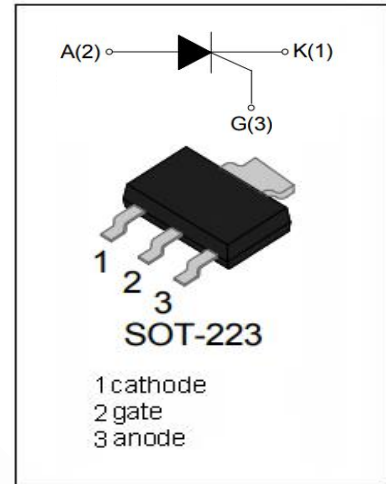
## BT169EW

### DESCRIPTION

- With SOT-223 packaging
- High surge capability
- Glass passivated junctions and center gate fire for greater parameter uniformity and stability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Switching applications



### ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage	500	V
$V_{\text{RRM}}$	Repetitive peak off-state voltage	500	V
$I_{\text{T(AV)}}$	Average on-state current	0.63	A
$I_{\text{T(RMS)}}$	RMS on-state current	1	A
$P_{\text{G(AV)}}$	Average gate power	0.1	W
$I_{\text{TSM}}$	Non-repetitive peak on-state current	8	A
$T_j$	Operating junction temperature	-40~110	$^\circ\text{C}$
$T_{\text{stg}}$	Storage temperature	-40~150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$I_{\text{RRM}}$	Repetitive peak off-state voltage	$V_{\text{RRM}}=500\text{V}$		5	$\mu\text{A}$
	Repetitive peak reverse voltage	$V_{\text{RRM}}=500\text{V}; T_j=110^\circ\text{C}$		100	
$I_{\text{DRM}}$	Repetitive peak reverse current	$V_{\text{RRM}}=500\text{V}$		5	$\mu\text{A}$
	Repetitive peak off-state current	$V_{\text{DRM}}=500\text{V}; T_j=110^\circ\text{C}$		100	
$I_{\text{GT}}$	Gate trigger current	$V_D=12\text{V}; I_T=10\text{mA}$		120	$\mu\text{A}$
$V_{\text{TM}}$	On-state voltage	$I_T=2\text{A}$		1.5	V
$I_{\text{H}}$	Holding current	$I_{\text{GT}}=0.5\text{mA}, V_D=12\text{V}$		5	mA
$V_{\text{GT}}$	Gate trigger voltage	$V_D=12\text{V}; I_T=10\text{mA}$		0.8	V

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