

isc Thyristors

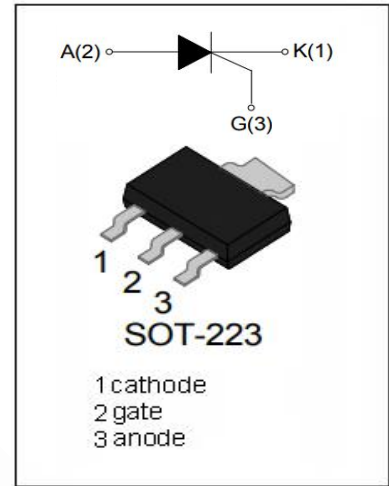
BT169EW

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_{DRM}	Repetitive peak off-state voltage	500	V
V_{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_{TSM}	Non-repetitive peak on-state current	8	A
T_j	Operating junction temperature	-40~110	$^\circ\text{C}$
T_{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_{RRM}	Repetitive peak off-state voltage	$V_{\text{RRM}}=500\text{V}$		5	μA
	Repetitive peak reverse voltage	$V_{\text{RRM}}=500\text{V}; T_j=110^\circ\text{C}$		100	
I_{DRM}	Repetitive peak reverse current	$V_{\text{RRM}}=500\text{V}$		5	μA
	Repetitive peak off-state current	$V_{\text{DRM}}=500\text{V}; T_j=110^\circ\text{C}$		100	
I_{GT}	Gate trigger current	$V_D=12\text{V}; I_T=10\text{mA}$		120	μA
V_{TM}	On-state voltage	$I_T=2\text{A}$		1.5	V
I_{H}	Holding current	$I_{\text{GT}}=0.5\text{mA}, V_D=12\text{V}$		5	mA
V_{GT}	Gate trigger voltage	$V_D=12\text{V}; I_T=10\text{mA}$		0.8	V

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