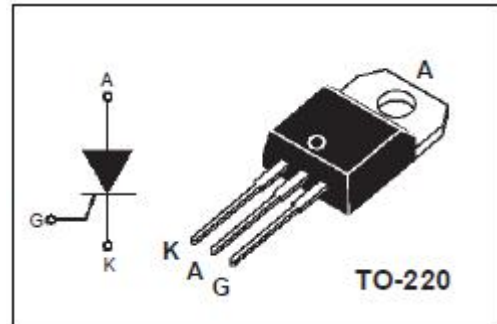


APPLICATIONS

- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


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

SYMBOL	PARAMETER	MIN	UNIT	
V_{DRM}	Repetitive peak off-state voltage	800	V	
V_{RRM}	Repetitive peak reverse voltage	800	V	
$I_{\text{T(RMS)}}$	RMS on-state current @ $T_c=90^\circ\text{C}$	12	A	
$I_{\text{T(AV)}}$	Average on-state current @ $T_c=90^\circ\text{C}$	8	A	
I_{TSM}	Surge non-repetitive on-state current	$T_p=8.3\text{ms}$	125	A
		$T_p=10\text{ms}$	120	
T_j	Operating junction temperature	-40~125	$^\circ\text{C}$	
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 reverse current	V_{RRM} Rated $T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.01 3	mA
I_{DRM}	Repetitive peak off-state current	V_{DRM} Rated $T_j=25^\circ\text{C}$ $T_j=25^\circ\text{C}$		0.01 3	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=24\text{A}; T_p=380\ \mu\text{s}$		1.6	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=33\ \Omega$		15	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=33\ \Omega$		1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		2.5	$^\circ\text{C/W}$

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