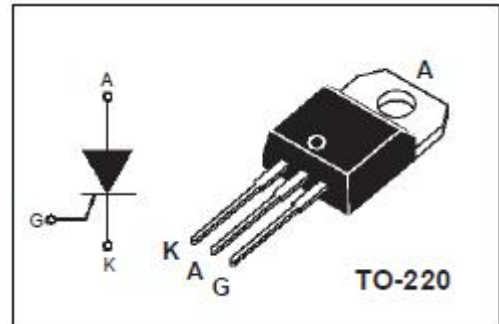


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APPLICATIONS

- 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		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{\text{T(RMS)}}$	RMS on-state current	@ $T_c=83^{\circ}\text{C}$	25	A
$I_{\text{T (AV)}}$	Average on-state current	@ $T_c=100^{\circ}\text{C}$	16	A
I_{TSM}	Surge non-repetitive on-state current	$T_p=8.3\text{ms}; T_c=25^{\circ}\text{C}$	314	A
		$T_p=10\text{ms}; T_c=25^{\circ}\text{C}$	300	
T_j	Operating junction temperature		-40~125	$^{\circ}\text{C}$
$P_{\text{G(AV)}}$	Average gate power dissipation	@ $T_c=125^{\circ}\text{C}$	1	W
T_{stg}	Storage temperature		-40~150	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RRM}=V_{DRM}$	$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.005 4	mA
I_{DRM}	Repetitive peak off-state current		$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.005 4	mA
V_{TM}	On-state voltage	$I_{TM}=50\text{A}; T_p=380\ \mu\text{s}$			1.6	V
I_{GT}	Gate-trigger current	$V_D = 12\text{ V}; R_L=33\ \Omega$		4	40	mA
V_{GT}	Gate-trigger voltage	$V_D = 12\text{ V}; R_L=33\ \Omega$			1.3	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			2.0	$^\circ\text{C/W}$

Notice:

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