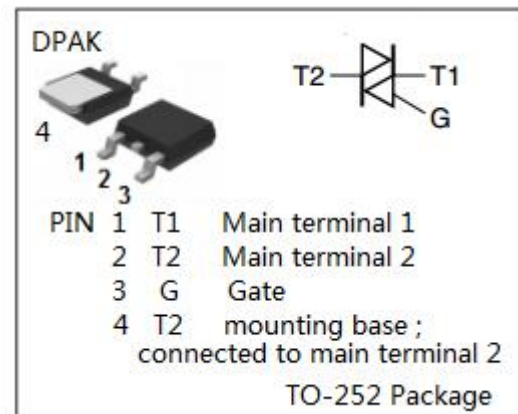


DESCRIPTION

- High blocking voltage capability
- Surface-mountable package
- Low holding current for low current loads and lowest EMI at commutation.
- Triggering in all four quadrants
- Very sensitive gate
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


FEATURES

- General purpose motor control
- General purpose switching

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT	
V_{DRM}	Repetitive peak off-state voltage	600	V	
$I_{T(RMS)}$	RMS on-state current (full sine wave; $T_{mb} \leq 107^\circ\text{C}$)	4	A	
I_{TSM}	Non-repetitive peak on-state current ($T_j = 25^\circ\text{C}; T_p = 20\text{ms}$)	25	A	
	Non-repetitive peak on-state current ($T_j = 25^\circ\text{C}; T_p = 16.7\text{ms}$)	27	A	
I^2t	I^2t for fusing $t_p = 10\text{ms}$; sine-wave pulse	3.1	A ² S	
di_T/dt	Rate of rise of on-state current $I_T = 6\text{A}, I_G = 0.2\text{A}, di_G/dt = 0.2\text{A/us}$	I - II - III	50	A/us
		IV	10	A/us
I_{GM}	Peak gate current	2	A	
V_{GM}	Peak gate voltage	5	V	
P_{GM}	Peak gate power dissipation	5	W	
$P_{G(AV)}$	Average gate power dissipation	0.5	W	
T_j	Operating junction temperature	125	°C	
T_{stg}	Storage temperature	-40~150	°C	

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
I _{DRM}	Repetitive peak off-state current		V _D =V _{DRM} , V _D =V _{DRM} , T _J =125°C		0.01 0.5	mA
I _{GT}	Gate trigger current	I	V _D =12V; I _T = 0.1A, R _L = 30 Ω		5	mA
		II			5	
		III			5	
		IV			10	
V _{TM}	On-state voltage		I _T = 5A		1.7	V
I _H	Holding current		I _{GT} = 0.1A, V _D = 12V		12	mA
V _{GT}	Gate trigger voltage		V _D =12V; I _T = 0.1A		1.5	V

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