

BT136

TO-220

Triac Series

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	V_{DRM}, V_{RRM}	600	V	
on-state RMS current	$I_T(RMS)$	4	A	$T_L \leq 66^\circ C$
NON repetitive surge peak on-state current	I_{TSM}	25	A	$T_p=20ms, T_j=25^\circ C$
critical rate of rise on-state current	$di/dt (Q_{1-3})$	50	A/ μs	$I_{TM}=20A, T_G=0.2A$
peak gate current	I_{GM}	2	A	
average gate power dissipation	$P_G(AV)$	0.5	W	
storage temperature range	T_{stg}	-40 to +150	$^\circ C$	
operating junction temperature range	T_j	125	$^\circ C$	

Electrical characteristics ($T_j=25^\circ C$) unless otherwise specified

Parameter	Symbol	Value	Unit	Test condition
gate trigger current	I_{GT}	≤ 10	mA	T2+G+ $V_D=12V, I_T=0.1A$
		≤ 10	mA	T2+G- $V_D=12V, I_T=0.1A$
		≤ 10	mA	T2-G- $V_D=12V, I_T=0.1A$
		≤ 25	mA	T2-G+ $V_D=12V, I_T=0.1A$
gate trigger voltage	V_{GT}	≤ 1.5	V	$V_D=12V, I_T=0.1A$
hold current	I_H	≤ 30	mA	$V_D=12V, I_T=0.1A$
critical rate of rise off-state voltage	dv/dt	≥ 50	V/ μs	$V_D=67\%V_{DRM}$
on-state voltage	V_{TM}	≤ 1.7	V	$I_T=5A$
off-state leakage current	I_{DRM}	≤ 0.5	mA	$V_D=V_{DRM}; T_j=125^\circ C$
thermal resistance	$R_{th(j-a)}$	60	$^\circ C/W$	
	$R_{th(j-c)}$	≤ 3.7		

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