

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-state 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		

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Rectron:](#)

[BT136](#)