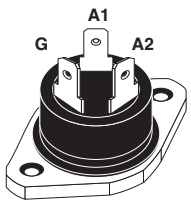
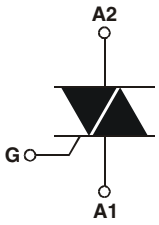
FEATURES

• Suitables for general purpose AC switching.They can be used as an ON/OFF function in applications such as atatic relays, heating regulation,Induction motor starting circuits.

• Minimum Lot-to-Lot variations for robust device performance and reliable operation



RD91



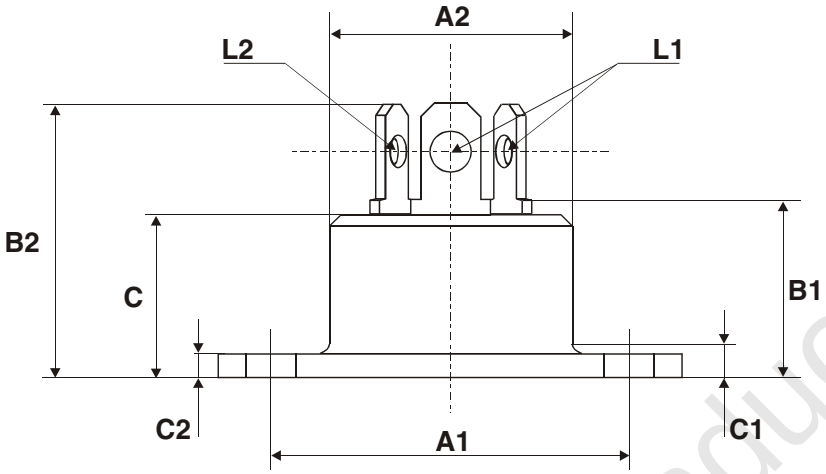
ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

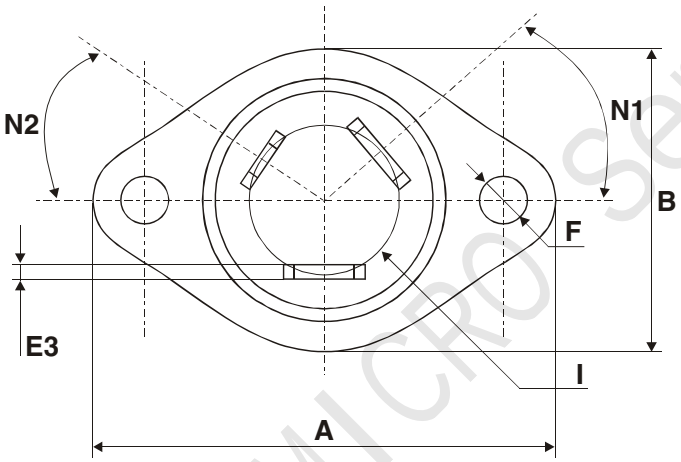
SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{RRM}	Repetitive peak reverse voltage	600	V
$I_{T(RMS)}$	RMS on-state current (full sine wave)T_j=95℃	40	A
I_{TSM}	Non-repetitive peak on-state current t_p=20ms	400	A
T_j	Operating junction temperature	-40~125	℃
T_{stg}	Storage temperature	-40~150	℃
$P_{G(AV)}$	Average gate power dissipation(T_j=125℃)	1	W
$R_{th(j-c)}$	Thermal resistance, junction to case	0.9	℃/W

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	B	C	UNIT
I_{RRM}	Repetitive peak reverse current		V_R=V_{RRM}, V_R=V_{RRM}, Tj=125℃	0.01 2.0	0.01 2.0	mA
I_{DRM}	Repetitive peak off-state current		V_D=V_{DRM}, V_D=V_{DRM}, Tj=125℃	0.01 2.0	0.01 2.0	mA
I_{GT}	Gate trigger current	Ⅰ	V_D=12V; R_L= 100Ω	50	25	mA
		Ⅱ		50	25	
		Ⅲ		50	25	
		Ⅳ		100	50	
I_H	Holding current		I_{GT}= 0.5A, Gate Open	60	35	mA
V_{GT}	Gate trigger voltage all quadrant		V_D=12V; R_L= 100Ω	1.5		V
V_{TM}	On-state voltage		I_T= 60A; t_p= 380μs	1.55		V

TO-220AB PACKAGE OUTLINE DIMENSIONS





REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A		40.00		1.575
A1	29.90	30.30	1.177	1.193
A2		22.00		0.867
B		27.00		1.063
B1	13.50	16.50	0.531	0.650
B2		24.00		0.945
C		14.00		0.551
C1		3.50		0.138
C2	1.95	3.00	0.077	0.118
E3	0.70	0.90	0.027	0.035
F	4.00	4.50	0.157	0.177
I	11.20	13.60	0.441	0.535
L1	3.10	3.50	0.122	0.138
L2	1.70	1.90	0.067	0.075
N1	33°	43°	33°	43°
N2	28°	38°	28°	38°