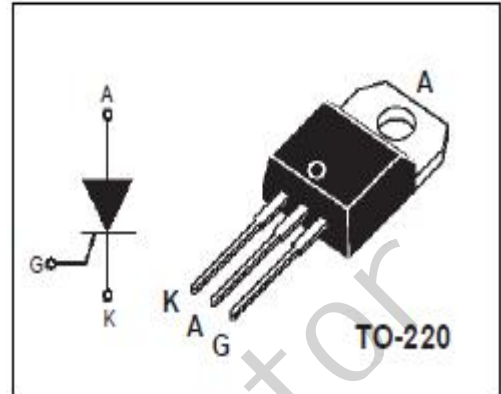


**DESCRIPTION**

- With TO-220 packaging
- Long-term stability
- Thyristor for line frequency
- Planar passivated chip
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

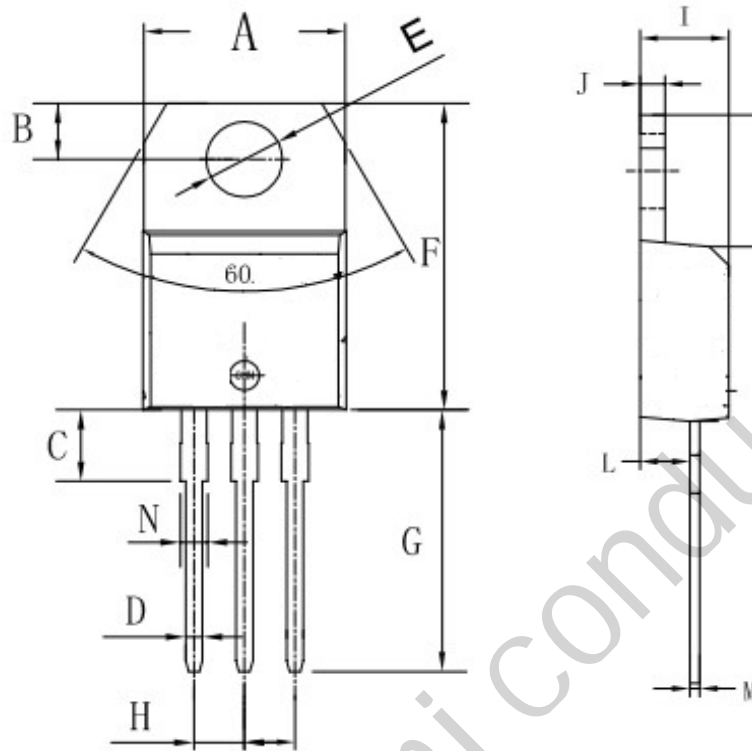
- Switching applications
- Line rectifying 50/60 Hz


**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	1200	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	1200	V
I <sub>T(AV)</sub>	Average forward current T <sub>c</sub> =96°C	16	A
I <sub>T(RMS)</sub>	RMS on-state current	25	A
I <sub>TSM</sub>	Surge non-repetitive on-state current ( 1/2 cycle, sine wave; T <sub>c</sub> =45°C )	50HZ 260 60HZ 250	A
P <sub>G(AV)</sub>	Average gate power dissipation	0.5	W
T <sub>j</sub>	Operating junction temperature	-40~125	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RM</sub> =V <sub>RRM</sub> V <sub>DM</sub> =V <sub>DRM</sub>		0.01 4	mA
I <sub>DRM</sub>	Repetitive peak off-state current				
V <sub>TM</sub>	On-state voltage	I <sub>TM</sub> = 50A; t <sub>p</sub> =380 μ s		1.6	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> = 12V; R <sub>L</sub> =33 Ω		40	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> = 12V; R <sub>L</sub> =33 Ω		1.5	V
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case		1.3	°C/W

**TO-220AB PACKAGE OUTLINE DIMENSIONS**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	9.8	10.4	0.385	0.409
B	2.65	3.1	0.104	0.122
C	2.8	4.2	0.110	0.165
D	0.7	0.92	0.027	0.036
E	3.75	3.95	0.147	0.155
F	14.8	16.1	0.582	0.633
G	13.05	13.6	0.513	0.535
H	2.4	2.7	0.094	0.106
I	4.38	4.61	0.172	0.181
J	1.15	1.36	0.045	0.053
K	5.85	6.82	0.230	0.268
L	2.35	2.75	0.092	0.108
M	0.35	0.65	0.013	0.025
N	1.18	1.42	0.046	0.055