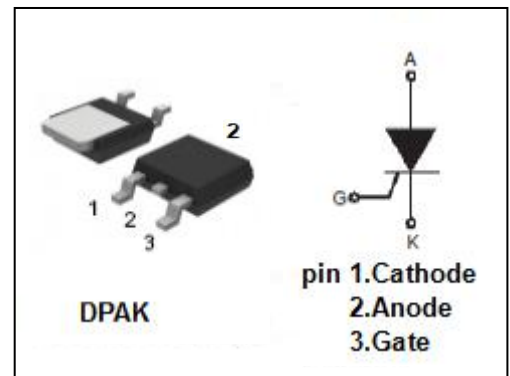


**isc Thyristors**
**BT258S-800R**
**APPLICATIONS**

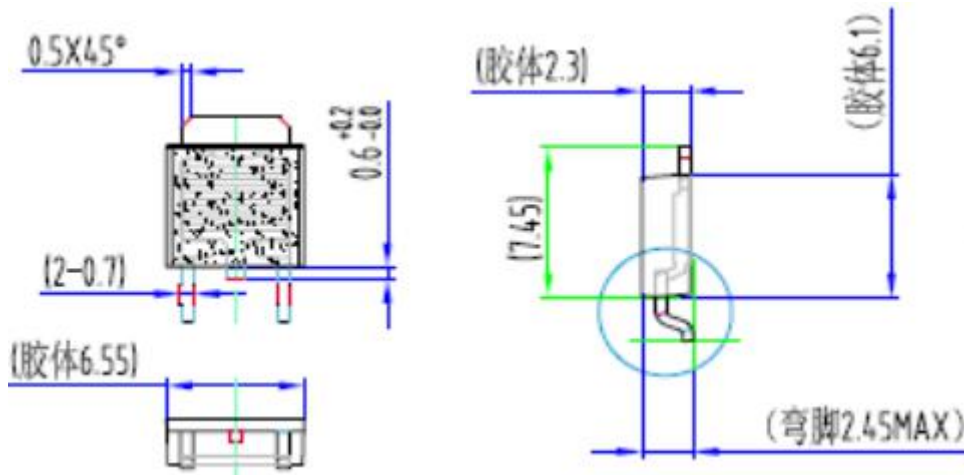
- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


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

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	800	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	800	V
I <sub>T(AV)</sub>	On-state current T <sub>c</sub> =80°C	5	A
I <sub>T(RMS)</sub>	RMS on-state current	8	A
I <sub>TSM</sub>	Surge non-repetitive on-state current T <sub>P</sub> =10ms	75	A
P <sub>G(AV)</sub>	Average gate power	0.5	W
di/dt	Repetitive rate of rise of on-state current after triggering T <sub>j</sub> =125°C	50	A/us
I <sup>2</sup> t	I <sup>2</sup> t for fusing t = 10 ms	28	A <sup>2</sup> S
I <sub>GM</sub>	Peak gate current tp=20us ,T <sub>j</sub> =125°C	2	A
T <sub>j</sub>	Operating Junction temperature	-40 ~+125	°C
T <sub>stg</sub>	Storage temperature	-40 ~+150	°C

**ELECTRICAL CHARACTERISTICS (TC=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RRM</sub> = 800V, T <sub>j</sub> =125°C		0.5	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>DRM</sub> = 800V, T <sub>j</sub> =125°C		0.5	mA
V <sub>TM</sub>	On-state voltage	I <sub>TM</sub> = 16A		1.6	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V; I <sub>T</sub> =0.1A		0.2	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =12V; I <sub>T</sub> =0.1A		1.0	V
I <sub>H</sub>	Holding current	I <sub>T</sub> =0.5A		30	mA
I <sub>L</sub>	Latching current	I <sub>G</sub> =1.2I <sub>GT</sub>		60	mA
dv/dt	Critical rate of rise of off-state voltage	V <sub>D</sub> =2/3V <sub>DRM</sub> T <sub>j</sub> =125°C	50		V/us
R <sub>th(j-c)</sub>	Thermal resistance junction to mounting base			2	°C/W

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