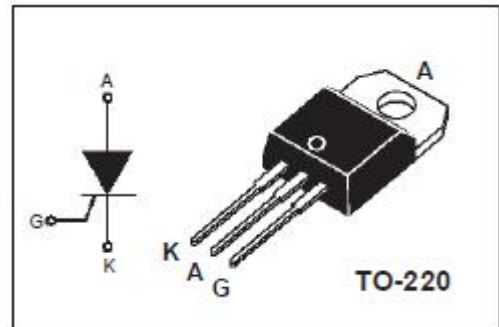


## isc Thyristors

2N6508

### 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( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage	600	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage	600	V
$I_{\text{T(AV)}}$	Average on-state current	16	A
$I_{\text{T(RMS)}}$	RMS on-state current	25	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	250	A
$P_{\text{G(AV)}}$	Average gate power dissipation	0.5	W
$T_j$	Operating junction temperature	-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature	-40~150	$^{\circ}\text{C}$

**isc Thyristors**

**2N6508**

**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> , R <sub>GK</sub> = 220 Ω ,	T <sub>j</sub> =25°C		10	μ A
			T <sub>j</sub> =125°C		2	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>DM</sub> =V <sub>DRM</sub> , ,R <sub>GK</sub> = 220 Ω	T <sub>j</sub> =25°C		10	μ A
			T <sub>j</sub> =125°C		2	mA
V <sub>TM</sub>	On-state voltage	I <sub>TM</sub> = 50A		1.8	V	
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> = 12 V; R <sub>L</sub> =100 Ω		30	mA	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> = 12 V; R <sub>L</sub> =100 Ω		1.5	V	
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case		1.5	°C/W	

**NOTICE:**

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