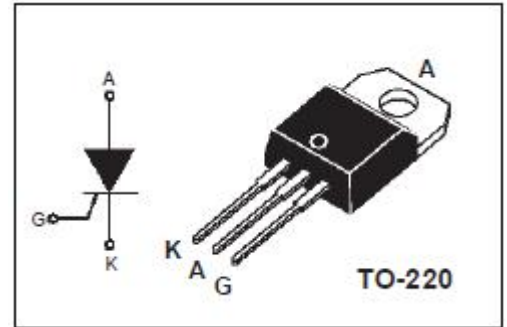


## isc Thyristors

## MCR218-4

## DESCRIPTION

- With TO-220 packaging
- High heat dissipation and durability
- Thermowatt construction for low thermal
- Glass passivated junctions and center gate fire for greater parameter uniformity and stability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## APPLICATIONS

- Switching applications

ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage	200	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage	200	V
$I_{\text{T(AV)}}$	Average on-state current $T_c=70^{\circ}\text{C}$	8	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current ( 1/2 cycle,sine wave;60HZ; $T_c=125^{\circ}\text{C}$ )	100	A
$P_{\text{G(AV)}}$	Average gate power dissipation $T_p=8.3\text{ms}; T_c=70^{\circ}\text{C}$	0.5	W
$T_j$	Operating junction temperature	-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature	-40~150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ( $T_c=25^{\circ}\text{C}$  unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$ $V_{\text{DM}}=V_{\text{DRM}}$ $T_j=25^{\circ}\text{C}$ $T_j=125^{\circ}\text{C}$		10	mA
$I_{\text{DRM}}$	Repetitive peak off-state current			2.0	
$V_{\text{TM}}$	On-state voltage	$I_{\text{TM}}=16\text{A}$		1.8	V
$I_{\text{GT}}$	Gate-trigger current	$V_D=12\text{V}; R_L=100\Omega$		25	mA
$V_{\text{GT}}$	Gate-trigger voltage	$V_D=12\text{V}; R_L=100\Omega$		1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		2.0	$^{\circ}\text{C/W}$

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