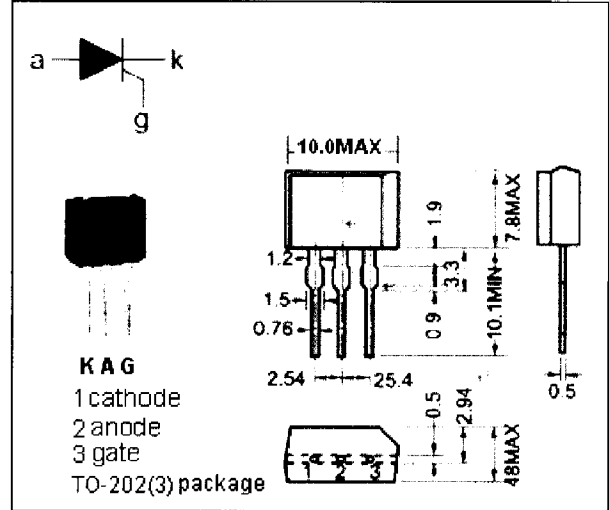


Thyristors

X0402MF

APPLICATIONS

- Highly sensitive triggering levels
- For capacitive discharge ignitions, motor control in kitchen aids, overvoltage crowbar protection in low power supplies applications.



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

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{RRM}	Repetitive peak reverse voltage	600	V
$I_{T(AV)}$	On-state current 180° conduction angle	4	A
I_{TSM}	Non-repetitive surge peak on-state current $t = 20\text{ms}$	20	A
$P_{G(AV)}$	Average gate power dissipation $T_j = 125^\circ\text{C}$	0.2	W
T_j	Junction temperature	125	
T_{stg}	Storage temperature	-40 to + 150	$^\circ\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$, $R_{GK}=1\text{k}\Omega$ $V_{RM}=V_{RRM}$, $R_{GK}=1\text{k}\Omega$, $T_j=125^\circ\text{C}$		5 500	μA
I_{DRM}	Repetitive peak off-state current	$V_{DM}=V_{DRM}$, $R_{GK}=1\text{k}\Omega$ $V_{DM}=V_{DRM}$, $R_{GK}=1\text{k}\Omega$, $T_j=125^\circ\text{C}$		5 500	μA
V_{TM}	On-state voltage	$I_{TM}= 4\text{A}$		1.7	V
I_{GT}	Gate-trigger current	$V_{DM}=12\text{V}; R_L=140\Omega$		200	μA
V_{GT}	Gate-trigger voltage	$V_{DM}=12\text{V}; R_L=140\Omega$		0.8	V
I_H	Holding current	$I_T= 0.05\text{A}$		5	mA

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