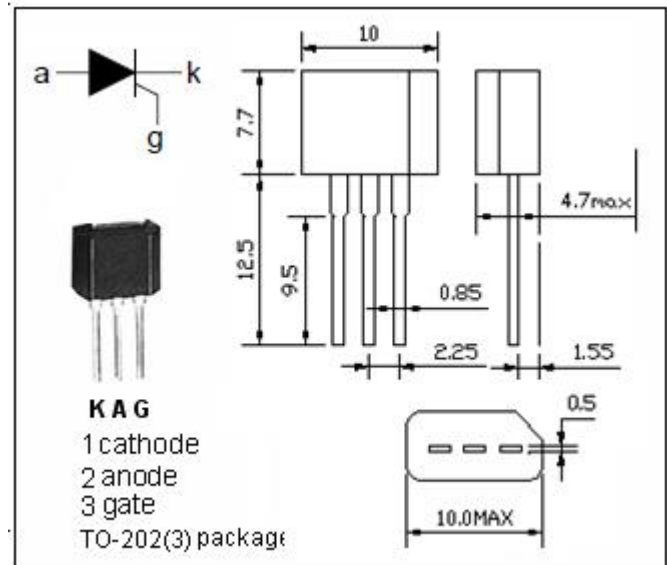


**isc Thyristors**
**X0405MF**
**APPLICATIONS**

- Highly sensitive triggering levels
- For capacitive discharge ignitions, motor control in kitchen aids, overvoltage crowbar protection in low power supplies applications.
- 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
$I_{\text{T(AV)}}$	On-state current $180^{\circ}$ conduction angle	4	A
$I_{\text{TSM}}$	Non-repetitive surge peak on-state current $t = 20\text{ms}$	30	A
$P_{\text{G(AV)}}$	Average gate power dissipation $T_j = 125^{\circ}\text{C}$	0.2	W
$T_j$	Junction temperature	125	
$T_{\text{stg}}$	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
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$ , $V_{\text{RM}}=V_{\text{RRM}}$ , $T_j=125^{\circ}\text{C}$		5 200	$\mu\text{A}$
$I_{\text{DRM}}$	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$ , $V_{\text{DM}}=V_{\text{DRM}}$ , $T_j=125^{\circ}\text{C}$		5 200	$\mu\text{A}$
$V_{\text{TM}}$	On-state voltage	$I_{\text{TM}}= 8\text{A}$ , $t_p = 380 \mu\text{s}$		1.8	V
$I_{\text{GT}}$	Gate-trigger current	$V_{\text{D}}=12\text{V}$ , $R_{\text{L}}=140 \Omega$ , $R_{\text{GK}}=1\text{K} \Omega$	20	50	$\mu\text{A}$
$V_{\text{GT}}$	Gate-trigger voltage	$V_{\text{D}}=12\text{V}$ , $R_{\text{L}}=140 \Omega$ , $R_{\text{GK}}=1\text{K} \Omega$		0.8	V
$I_{\text{H}}$	Holding current	$V_{\text{D}}=24\text{V}$ , $R_{\text{GK}}=1\text{K} \Omega$ , $I_{\text{TM}}=4\text{A}$		6	mA

**NOTICE:**

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