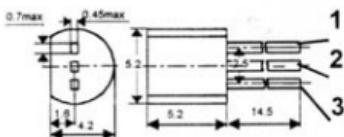


# ML 406

## Silicon controlled rectifier (SCR) in TO-92 package

**Pinouts:**

1- Anode, 2- Gate, 3- Cathode

**Maximum ratings**

Symbol	Parameter, units	Limits
$V_{drrm}$	Peak repetitive forward voltage, V, $R_{gk}=1\text{k}\Omega$	400
$V_{rrm}$	Repetitive peak reverse voltage, V	6
$I_{tr(\text{rms})}$	On-state current, A	All Conduction Angles
$I_t(A_V)$	Average on-state current, A	Half Cycle, $\theta=180^\circ$
$I_{tr(\text{sm})}$	Nonrepetition on-state current, A	Half Cycle, 50Hz
$V_{grm}$	Peak reverse gate voltage, V	$I_{gr}=0.01\text{mA}$

**Electrical characteristics ( $T_A = 25^\circ\text{C}$ )**

Symbol	Parameter, units test conditions	Limits	
		min	max
$I_{drrm}$	Off state leakage current, $\mu\text{A}$ , @ $V_{drrm}$ , $R_{gk}=1\text{k}\Omega$		1
$V_t$	On state voltage, V, $I_t=1.2\text{A}$		1.93
$I_{gt}$	Gate trigger current, mA, $V_d=6\text{V}$		0.12
$V_{gt}$	Gate trigger voltage, V, $V_d=6\text{V}$		0.8
$I_h$	Holding current, mA, $R_{gk}=1\text{k}\Omega$		5
$dV/dt$	Crit. rate of voltage rise, $\text{V}/\mu\text{s}$ , $V_d=0.67V_{drrm}$ , $R_{gk}=1\text{k}\Omega$	25	
$di/dt$	Crit. rate of current rise, $\text{A}/\mu\text{s}$ , $I_g=10\text{mA}$ , $di_g/dt=0.1\text{A}/\mu\text{s}$	30	
$t_{gd}$	Gate control delay time, ns, $I_g=10\text{mA}$ , $di_g/dt=0.1\text{A}/\mu\text{s}$		200