

T0450H-8C 4A TRIAC

Rev.A.1.1

DESCRIPTION:

The T0450H-8C triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triacs, T0450H-8C provides a very high switching capability up to junction temperatures of 150°C. From T2 terminals to external heatsink. Package TO-220C is RoHS compliant.

Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	4	kV
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ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=150$ $R_L=3.3k$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	50	mA
				60	
I_H	$I_T=100mA$		MAX.	40	mA
dV/dt	$V_D=540V$ Gate Open $T_j=150$		MIN.	1200	V/s
$(dI/dt)_c$	$V_D=150V$ $T_j=150$		MIN.	10	A/ms
t_{on}	$I_G=80mA$ $I_A=400mA$ $I_R=40mA$ $T_j=25$		TYP.	5	s
t_{off}				50	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=5.5A$ $t_p=380$ s	$T_j=25$	1.4	V
V_{TO}	Threshold voltage	$T_j=150$	0.6	V
R_D	Dynamic resistance	$T_j=150$	129	P
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	A
I_{RRM}		$T_j=150$	1	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	2	$^{\circ}W$
$R_{th(j-a)}$	junction to ambient (AC)	60	$^{\circ}W$

FIG.1: Maximum power dissipation versus RMS on-state current

FIG.2: RMS on-state current versus case temperature

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	
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