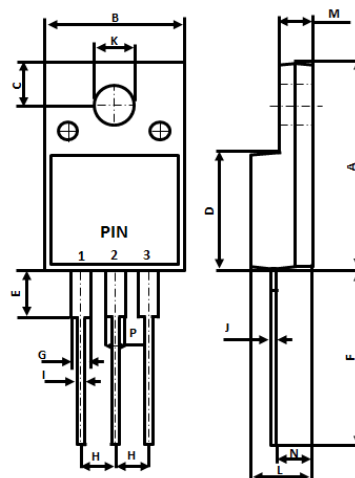


TRIACS
SILICON BIDIRECTIONAL THYRISTORS
TRIACS
16 AMPERES RMS
800 VOLTS
FEATURES

- Passivated die for reliability and uniformity
- Three-quadrant triggering
- Blocking voltage to 800V
- Low level triggering and holding characteristics
- Isolated mounting base package

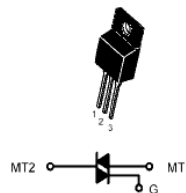
MECHANICAL DATA

- Case: Molded plastic
- Weight: 1.625 grams

ITO-220AB


ITO-220AB		
DIM	MIN	MAX
A	14.95	15.95
B	10.00	10.40
C	2.76	3.36
D	8.50	8.80
E	3.30	3.90
F	13.00	13.70
G	1.15	1.70
H	2.40	2.70
I	0.50	0.80
J	0.45	0.70
K	3.00Ø	3.30Ø
L	4.46	4.87
M	2.48	2.80
N	2.50	2.80
P	1.50	1.90
All Dimensions in millimeter.		

PIN ASSIGNMENT	
1	Main terminal 1
2	Main terminal 2
3	Gate


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Peak repetitive off-state voltage ($T_J = -40$ to 150°C , sine wave, 50 to 60 Hz; gate open)	V_{DRM}	800	V
Peak repetitive off-state voltage ($T_J = -40$ to 125°C , sine wave, 50 to 60 Hz; gate open) (Note 1)	V_{RRM}	800	V
On-stage RMS current (Full cycles sine wave, 60 Hz, $T_C = 80^\circ\text{C}$)	$I_{\text{T(RMS)}}$	16	A
Peak non-repetitive surge current (one full cycle 60 Hz, $T_J = 25^\circ\text{C}$)	I_{TSM}	150	A
Circuit fusing consideration ($t = 8.3\text{ms}$)	I^2t	93	A^2S
Peak gate power	P_{GM}	5	W
Operating junction temperature range	T_J	-40 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-40 to +150	$^\circ\text{C}$
Dielectric strength from terminals to case, AC with $t = 1$ minute, $\text{RH} < 30\%$	V_{dis}	2500	V

Note :

- (1) V_{DRM} and V_{RRM} for all types can be applied on a continuous basis.
Blocking voltages shall not be tested with a constant current source such that the voltage ratings of the devices are exceeded.

REV. 3, AUG.-2020, KTXC42

Please be aware that an **Important Notice and Disclaimer** concerning availability, disclaimers, and use in Critical applications of LSC products thereto appears at the end of this Data Sheet.

RATING AND CHARACTERISTIC CURVES T16M35T800HC

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Thermal resistance from junction to heatsink	R_{thJc} R_{thJa}	4.3 7.5	$^{\circ}C/W$
Maximum lead temperature for soldering purposes (1/8" form case for 10 seconds)	TL	260	$^{\circ}C$

OFF CHARACTERISTICS

PARAMETER	SYMBOL	MAX	UNIT
Peak repetitive forward or reverse blocking current @ $T_J = 25^{\circ}C$ ($V_{AK} = \text{rated } V_{DRM}$ and V_{RRM} , gate open) @ $T_J = 150^{\circ}C$	I_{DRM} I_{RRM}	5 2	μA mA

ON CHARACTERISTICS

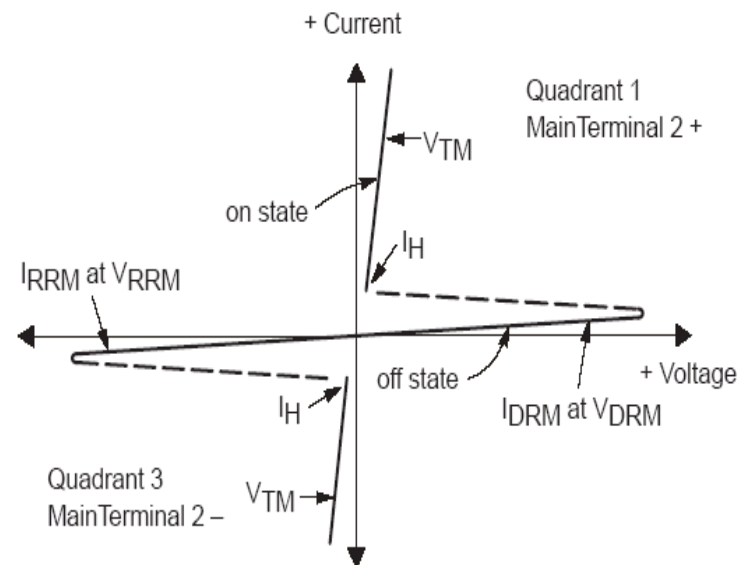
PARAMETER	SYMBOL	TYP.	MAX	UNIT
Peak forward on-state voltage ($I_{TM} = \pm 16A$ peak @ $T_P \leq 2.0$ ms, duty cycle $\leq 2\%$)	V_{TM}	1.3	1.5	V
Gate trigger current ($V_{AK} = 12V$, $R_L = 100\Omega$)	I_{GT1} I_{GT2} I_{GT3}	--	35	mA
Gate trigger voltage ($V_{AK} = 12V$, $R_L = 100\Omega$)	V_{GT1} V_{GT2} V_{GT3}	0.9	1	V
Holding current ($V_{AK} = 12V$, $R_L = 100\Omega$)	I_{H1} I_{H3}	--	35 50	mA
Latching current ($V_{AK} = 12V$, $R_L = 100\Omega$)	I_{L1} I_{L2} I_{L3}	--	50 60 50	mA

DYNAMIC CHARACTERISTICS

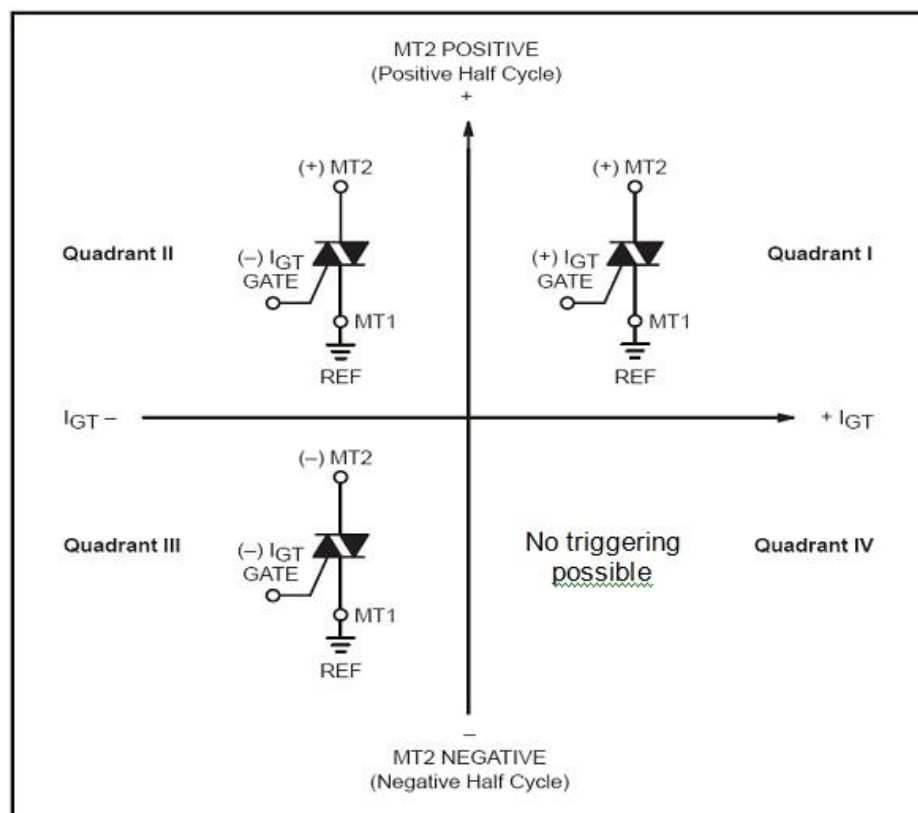
PARAMETER	SYMBOL	MIN.	UNIT
Critical rate of rise of off-stage voltage ($V_{AK} = 67\%$ rated V_{DRM} , exponential waveform @ $T_J = 150^{\circ}C$, gate open)	dv/dt	500	V/us

RATING AND CHARACTERISTIC CURVES T16M35T800HC

Symbol	Parameter
V_{DRM}	Peak Repetitive Forward Off State Voltage
I_{DRM}	Peak Forward Blocking Current
V_{RRM}	Peak Repetitive Reverse Off State Voltage
I_{RRM}	Peak Reverse Blocking Current
V_{TM}	Maximum On State Voltage
I_H	Holding Current



Quadrant Definitions



All polarities are referenced to MT1

With in -phase signal (using standard AC lines) quadrants I and III are used

Fig.1- Holding Current Variation

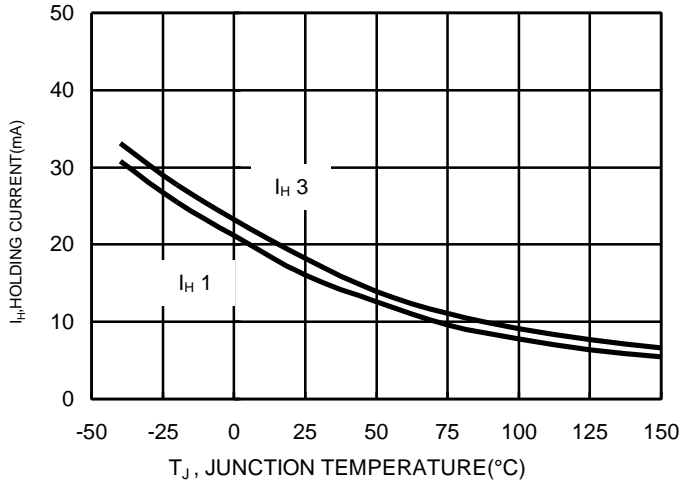


Fig.2- Gate Trigger Current Variation

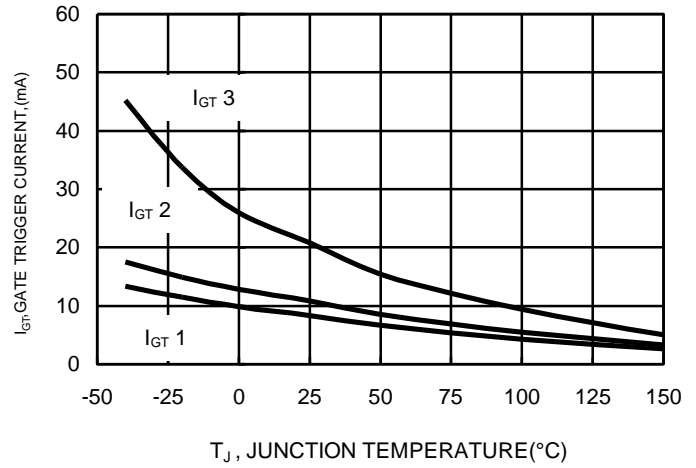


Fig.3- Gate Trigger Voltage Variation

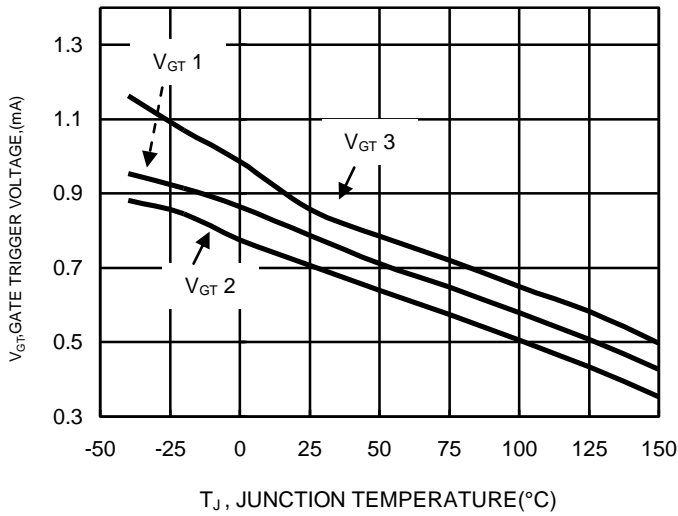


Fig.4- Typical Latching Current Versus Junction Temperature

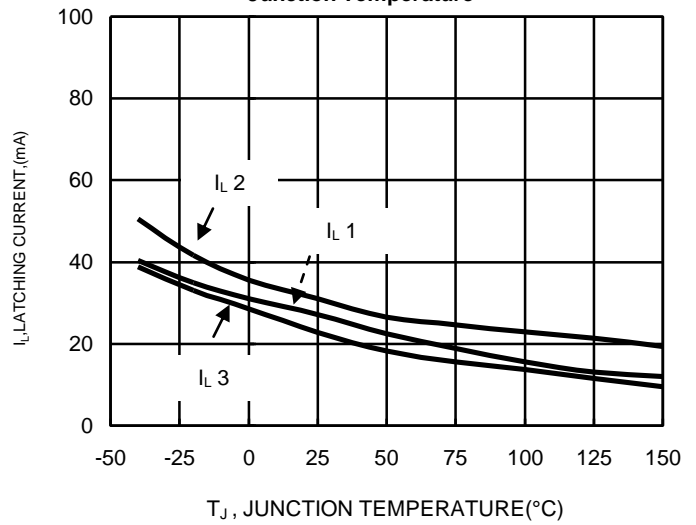


Fig.5- On-State Characteristics

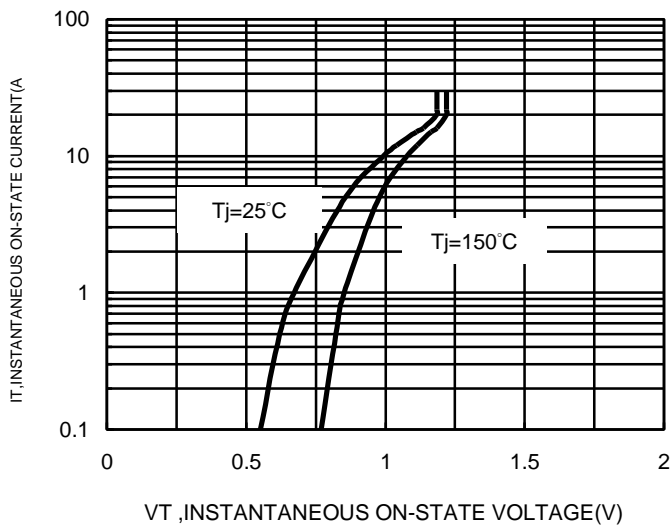
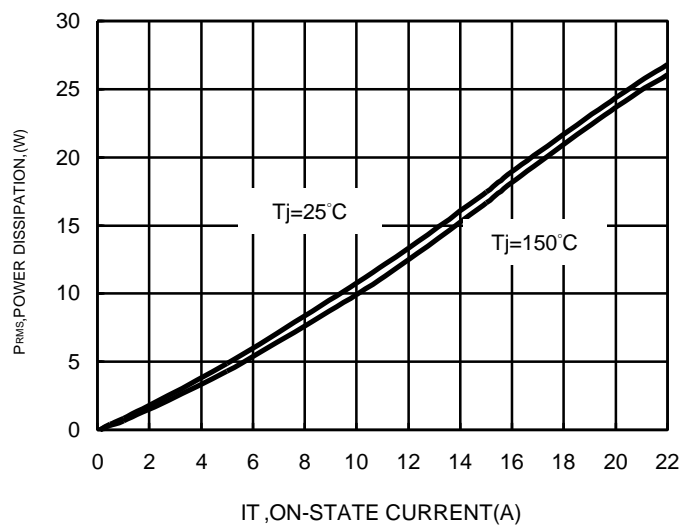


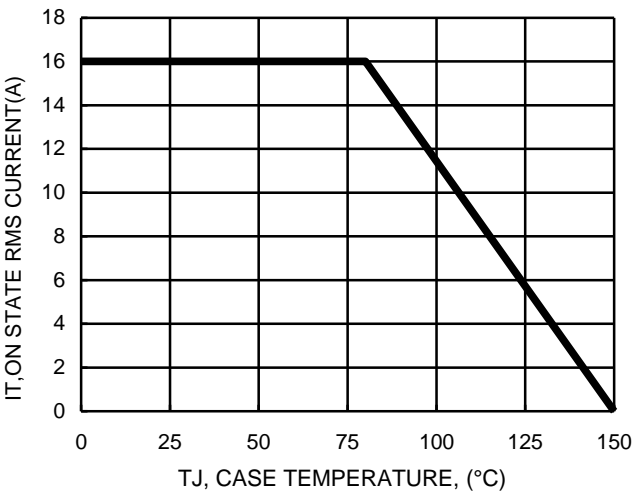
Fig.6- Power Dissipation versus I_T



RATING AND CHARACTERISTIC CURVES
T16M35T800HC



Fig.7- On-state Current Derating Curve



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