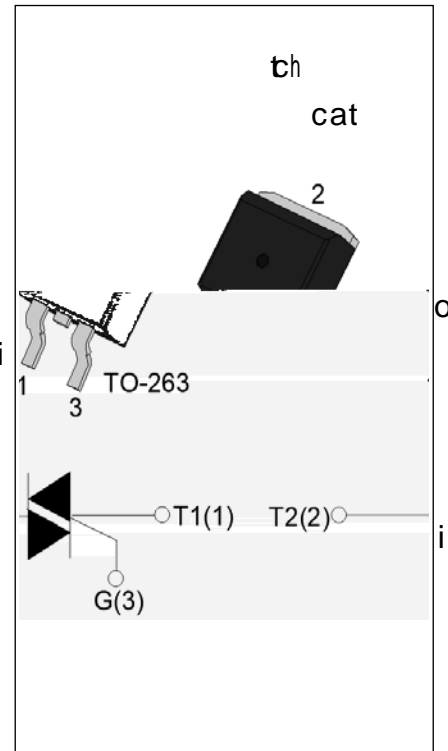




T0635H-6E 6A TRIAC

Rev.A.1.0

The T0635H-6E is a 6A, 600V, 35mA, 3-phase, 3-wire, 3-terminal, TO-263 package, 6A TRIAC. It is designed for use in AC power control applications. The package is TO-263.



Symbol	Value	Unit
$I_{T(RMS)}$	6	A
V_{RM} / V_{RRM}	600	V
$t_{T I / II / III}$	35/35/35	mA

Parameter	Symbol	Value	Unit
Storage temperature	T_s	-40-150	$^{\circ}C$
Operating temperature	T_j	-40-150	$^{\circ}C$
Repetitive peak voltage (T _j = 150 $^{\circ}C$)	V_{RM}	600	V
Repetitive peak voltage (T _j = 25 $^{\circ}C$)	V_{RRM}	600	V
RMS current (T _j = 132 $^{\circ}C$)	$I_{T(RMS)}$	6	A
Non-repetitive peak current (full cycle pulse, T _j = 25 $^{\circ}C$)	I_{TSM}	60	A
Non-repetitive peak current (full cycle pulse, T _j = 25 $^{\circ}C$)		66	
Peak current (T _j = 25 $^{\circ}C$)	I_{TM}	18	A
Cr (d = 2 × t _{TM} , f = 100Hz, T _j = 150 $^{\circ}C$)	dI/dt	80	A/ μ s
Peak gate current (t _p = 20 μ s, T _j = 150 $^{\circ}C$)	I_{GM}	4	A
Average gate power (T _j = 150 $^{\circ}C$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W

Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive; I.G. 8)	V_p	3	kV
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($T_j=25^\circ\text{C}$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{BT}	$V_{GS}=12\text{V}$ $R_L=33\Omega$	I - II - III	MAX.	35	mA
V_{GT}		I - II - III	MAX.	1	V
V_G	$V_{GS}=V_{RMS}$ $T_j=150^\circ\text{C}$ $R_L=3.3\text{K}$	I - II - III	MIN	0.2	V
I_L	$I_{BT}=1.2 I_{BT}$	I - III	MAX.	50	mA
		II		70	
I_H	$I_T=100\text{mA}$		MAX.	45	mA
dV/dt	$V_{GS}=400\text{V}$ Gate Open $T_j=150^\circ\text{C}$		MIN	1200	V/ μs
$(dI/dt)_c$	$(dV/dt)_c=20\text{V}/\mu\text{s}$, $T_j=150^\circ\text{C}$		MIN.	3	A/ms
t_{on}	$I_{BT}=40\text{mA}$ $I_{off}=200\text{mA}$ $I_{peak}=20\text{mA}$ $T_j=25^\circ\text{C}$		TYP.	3	μs
t_{off}				30	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{RM}=8.5\text{A}$ $t_p=380\mu\text{s}$	$T_j=25^\circ\text{C}$	1.4	V
V_{TO}	Thermal voltage	$T_j=150^\circ\text{C}$	0.8	V
$R_{\theta(j-c)}$	junction to case	$T_j=150^\circ\text{C}$	63	$^\circ\text{C}/\text{W}$
$R_{\theta(j-a)}$	$V_{GS}=V_{RMS}$ $V_R=V_{RRM}$	$T_j=25^\circ\text{C}$	5	μA
$R_{\theta(j-a)}$		$T_j=150^\circ\text{C}$	0.8	mA

cases

Symbol	Parameter	Value	Unit
$R_{\theta(j-c)}$	junction to case	2.3	$^\circ\text{C}/\text{W}$
$R_{\theta(j-a)}$	junction to ambient		

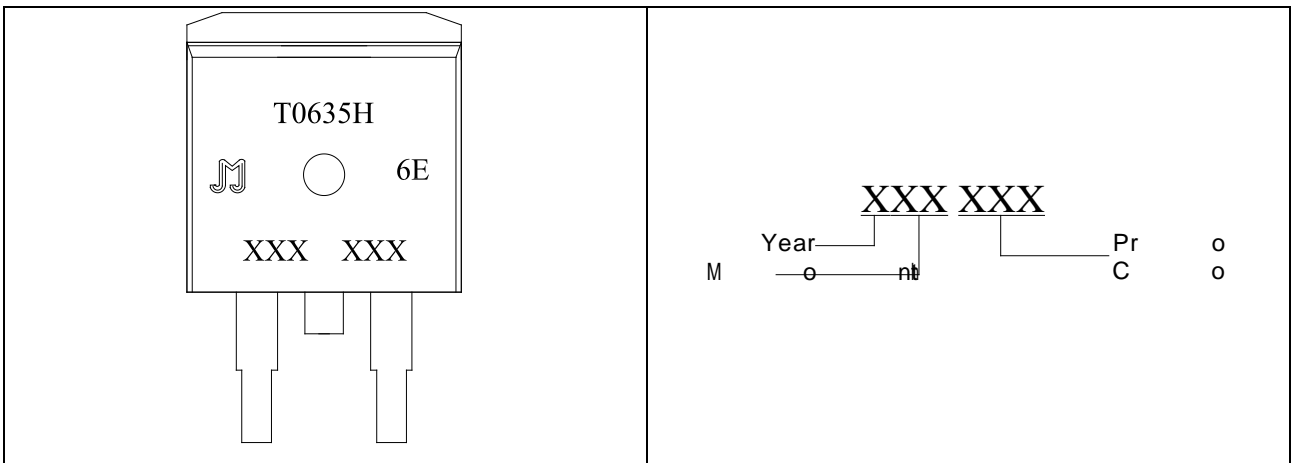
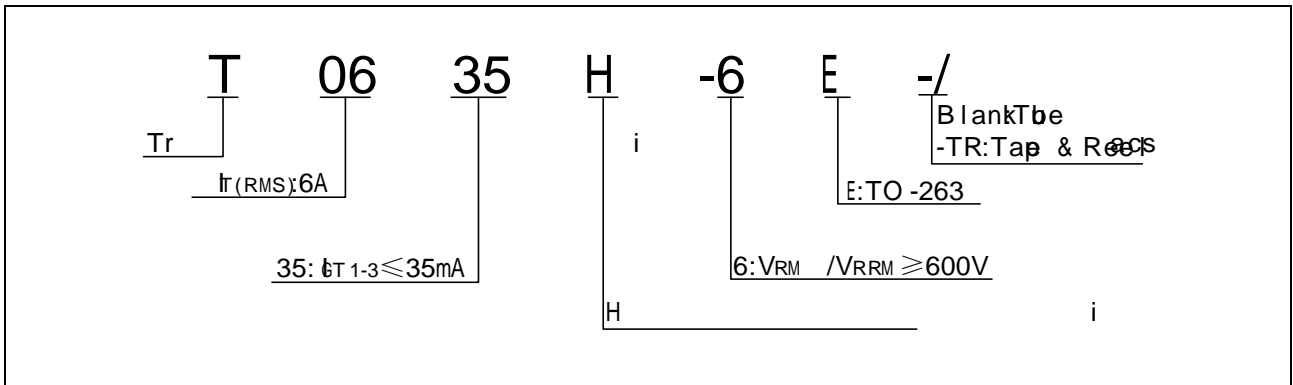


FIG.1 Max
amplitude

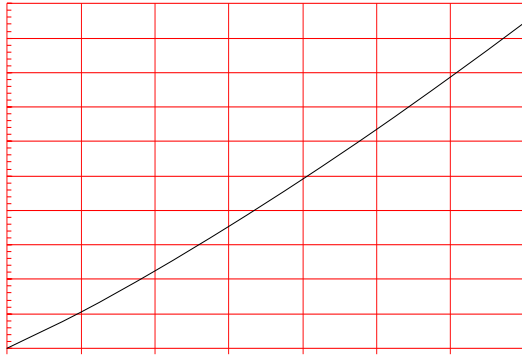


FIG.2: RMS
amplitude

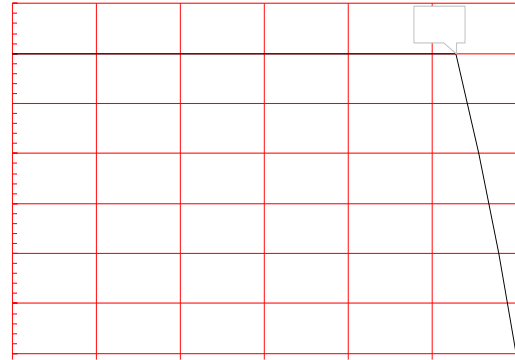


FIG.3: RMS
amplitude (p
thickness:35μm)(full cycle)

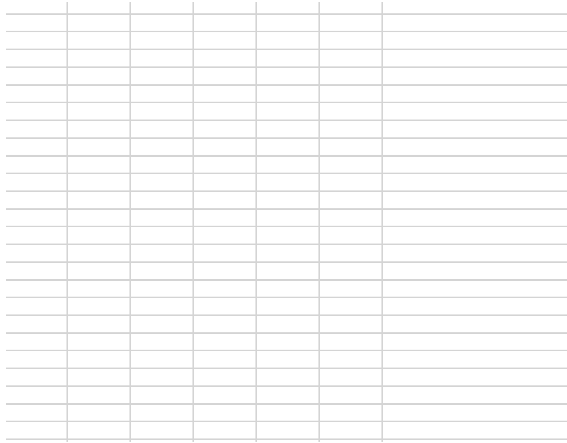


FIG.4: Spe
number o
f cycles

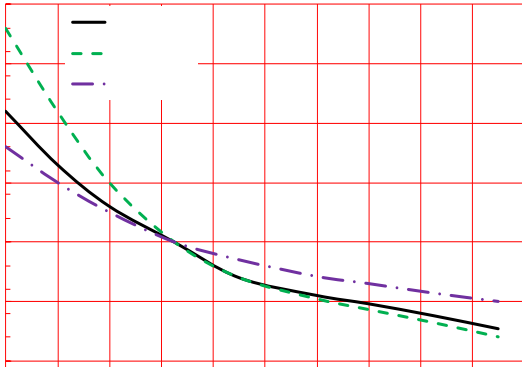
FIG.7: Relat

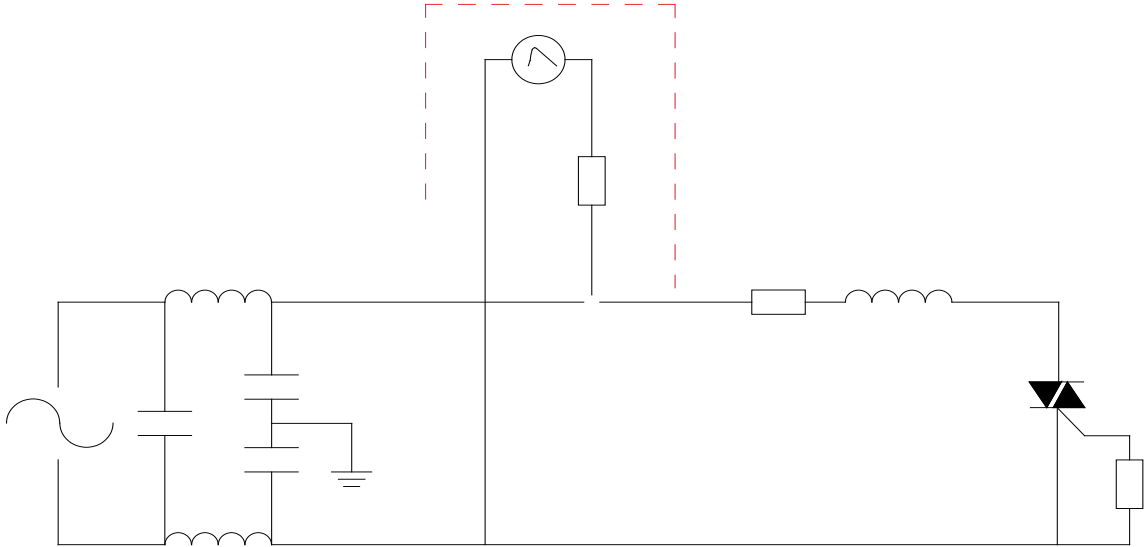
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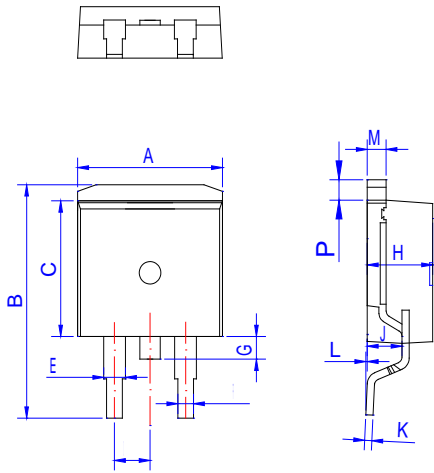




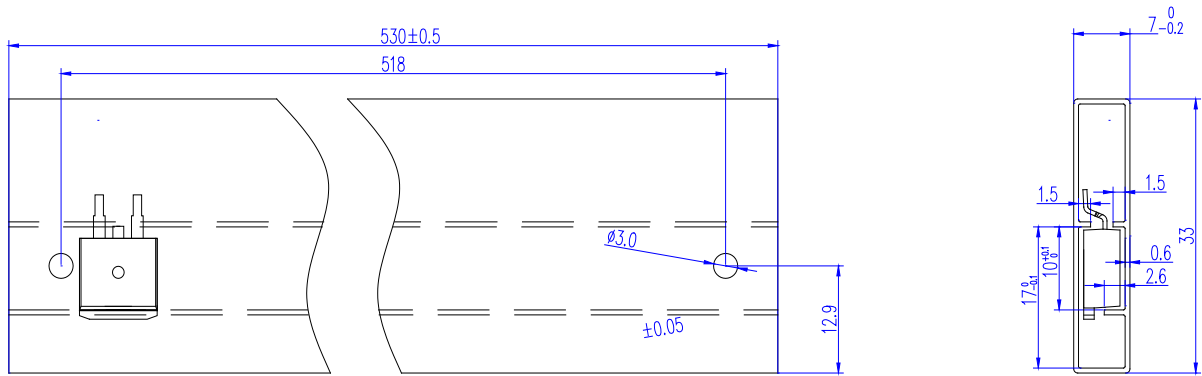
Order code	Voltage V _{DRM} /V _{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T0635H-6E	600	35	TO-263	50	Tube
T0635H-6E-TR				800	Tape & Reel

Document Revision History

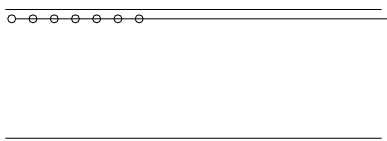
date	Rev	Changes
Apr. 10, 2023	A. 1.0	Released



Ref.	Dimensions					
	M			Inches		
	M	Tp	Max	M	Tp	Max
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.37		0.378
D	2.40		2.70	0.094		0.106
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033
G	1.00		1.50	0.039		0.059
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0	0.10	0.25	0	0.004	0.010
M	1.25		1.35	0.049		0.053
P	1.20		1.50	0.047		0.059



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-263	TUBE	50	1,000	5,000



Ref.	M			Inches		
	M	Tp	Max	M	Tpi	Max
	W	23.70	24.00	24.30	0.933	0.945
E	1.65	1.75	1.85	0.065	0.069	0.073
i	11.40	11.50	11.60	0.449	0.453	0.457
0	-	1.50	1.60	-	0.059	0.063
1	-	1.50	1.60	-	0.059	0.063
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	15.90	16.00	16.10	0.626	0.630	0.634
P2	1.90	2.00	2.10	0.075	0.079	0.083
A0	10.80	10.90	11.00	0.425	0.429	0.433
B0	16.20	16.30	16.40	0.638	0.642	0.646
K0	4.80	4.90	5.00	0.189	0.193	0.197
t	0.35	0.40	0.45	0.014	0.016	0.018

Information regarding the use of this product is provided in the user manual. The user manual is available on the JieJie Microelectronics Co., Ltd. website. The user manual is available in English and Chinese. The user manual is available in PDF format. The user manual is available in the following languages: English, Chinese, and Spanish. The user manual is available in the following formats: PDF, HTML, and EPUB. The user manual is available in the following locations: JieJie Microelectronics Co., Ltd. website, JieJie Microelectronics Co., Ltd. user manual, and JieJie Microelectronics Co., Ltd. user manual. The user manual is available in the following languages: English, Chinese, and Spanish. The user manual is available in the following formats: PDF, HTML, and EPUB. The user manual is available in the following locations: JieJie Microelectronics Co., Ltd. website, JieJie Microelectronics Co., Ltd. user manual, and JieJie Microelectronics Co., Ltd. user manual.