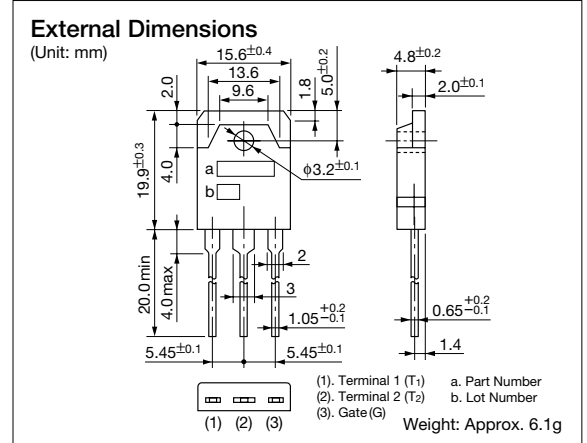


TO-3P 16A Triac

TM1641P-L(L), TM1661P-L(L)

Features

- Repetitive peak off-state voltage: $V_{DRM}=400, 600V$
- RMS on-state current: $I_{T(RMS)}=16A$
- Gate trigger current: $I_{GT}=30mA$ max (MODE I, II, III)



Absolute Maximum Ratings

Parameter	Symbol	Ratings		Unit	Conditions
		TM1641P-L(L)	TM1661P-L(L)		
Repetitive peak off-state voltage	V_{DRM}	400	600	V	
RMS on-state current	$I_{T(RMS)}$	16		A	Conduction angle 360°, $T_c=103^{\circ}C$
Surge on-state current	I_{TSM}	160		A	50Hz full-cycle sinewave, Peak value, Non-repetitive, $T_j=125^{\circ}C$
Peak gate voltage	V_{GM}	10		V	
Peak gate current	I_{GM}	2		A	
Peak gate power loss	P_{GM}	5		W	
Average gate power loss	$P_{G(AV)}$	0.5		W	
Junction temperature	T_j	-40 to +125		$^{\circ}C$	
Storage temperature	T_{stg}	-40 to +125		$^{\circ}C$	

Electrical Characteristics

($T_j=25^{\circ}C$, unless otherwise specified)

Parameter	Symbol	Ratings			Unit	Conditions	
		min	typ	max			
Off-state current	I_{DRM}			2.0	mA	$V_D=V_{DRM}, R_{GK}=\infty, T_j=125^{\circ}C$	
				0.1		$V_D=V_{DRM}, R_{GK}=\infty, T_j=25^{\circ}C$	
On-state voltage	V_{TM}			1.6	V	Pulse test, $I_{TM}=20A$	
Gate trigger voltage	V_{GT}	I	0.8	1.5	V	$V_D=6V, R_L=10\Omega, T_c=25^{\circ}C$	T_2^+, G^+
		II	0.7	1.5			T_2^+, G^-
		III	0.8	1.5			T_2^-, G^-
		IV	1.0				T_2^-, G^+
Gate trigger current	I_{GT}	I	12	30	mA	$V_D=6V, R_L=10\Omega, T_c=25^{\circ}C$	T_2^+, G^+
		II	16	30			T_2^+, G^-
		III	25	30			T_2^-, G^-
		IV	70				T_2^-, G^+
Gate non-trigger voltage	V_{GD}	0.2			V	$V_D=1/2 \times V_{DRM}, T_j=125^{\circ}C$	
Holding current	I_H		25		mA	$V_D=6V$	
Thermal resistance	R_{th}			1.2	$^{\circ}C/W$	Junction to case	

TM1641P-L(L), TM1661P-L(L)