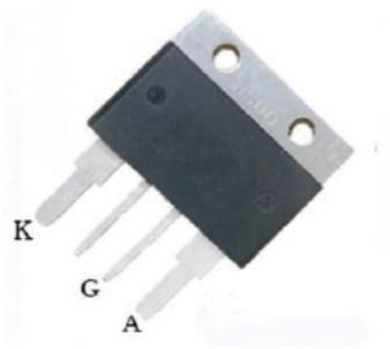
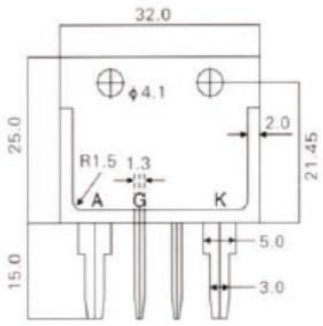
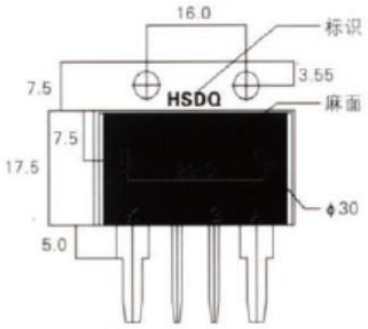
BTA100 100A 1200V TRIAC







Characteristics: Advanced glass passivation technology; sensitive control gate trigger current; low on-state voltage drop; ROHS certified.

Applications: Used in various power circuits, universal switches, small motor controllers, color light controllers, leakage protectors, logic integrated circuit drivers, motorcycle ignition systems, and other circuits.

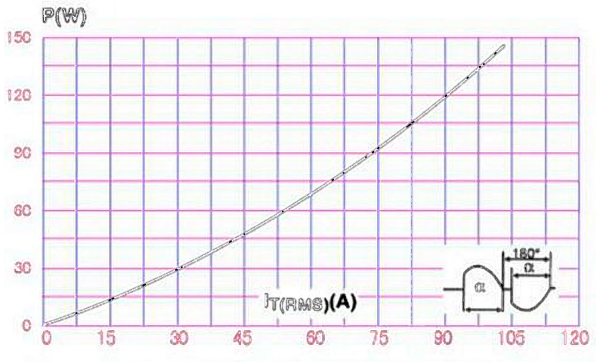
Extreme values

Parameter name	Symbol	Specification value	Unit
Peak Repetitive Off-State Voltage	V_{DRM}	≥800	V
Peak Repetitive Reverse Voltage	V_{RRM}	≥800	V
RMS On-State Current	$I_{T(RMS)}$	100	A
Transient Surge Current	I_{TSM}	1000	A
Operating Junction Temperature	T_j	-40 ～ 125	℃
Storage Temperature	T_{stg}	-40 ～ 150	℃

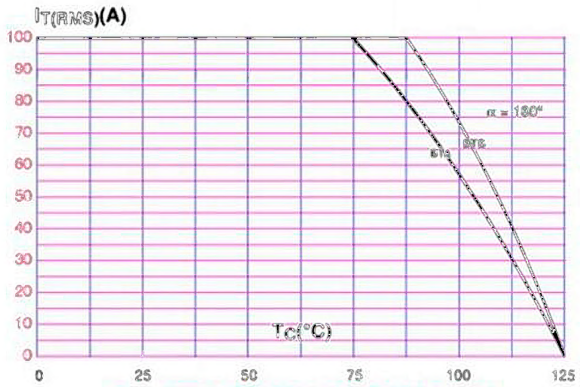
Electrical Characteristics (Tj=25℃)

Parameter Name		符号	规范值	单位	测试条件
Peak Forward Voltage		V_{TM}	1.5	V	I_T=120A
Reverse Repetitive Peak Current		I_{DRM}	≤1.5	mA	V_{DRM}=800V
Gate Trigger Current	T2+G+	I_{GT}	≤50	mA	V_{AK}=12V R_L=10Ω
	T2+G-		≤50		
	T2-G-		≤50		
	T2-G+		≤80		
Gate Trigger Voltage		V_{GT}	≤1.3	V	V_D=12V R_L=10Ω
Holding Current		I_H	≥80	mA	
Reverse Voltage Rate of Rise		dv/dt	≥500	V/μs	
Junction Thermal Resistance		R_{jc}	≤1.0	℃/W	

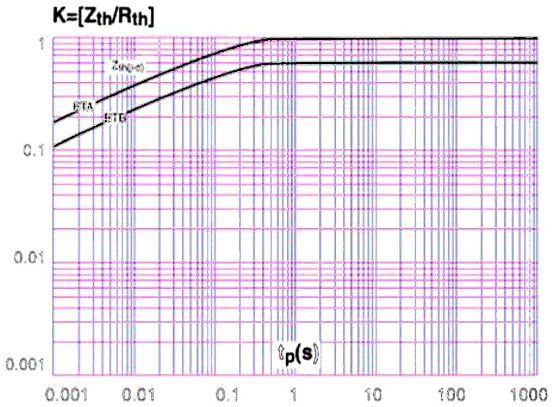
BTA100 Characteristics Curve



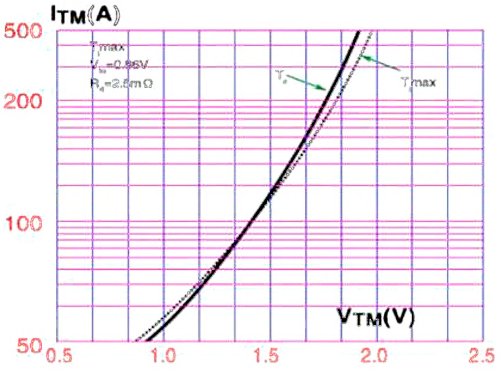
1. Power Consumption vs. Current Curve (180°)



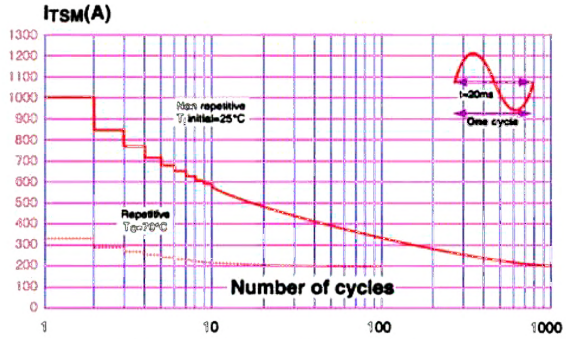
2. Case Temperature and Root Mean Square (RMS) Current Curve



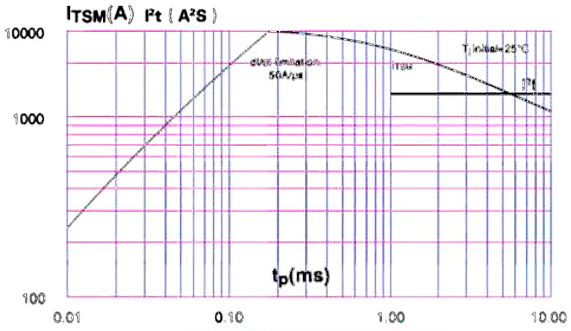
3. Transient Thermal Resistance Curve



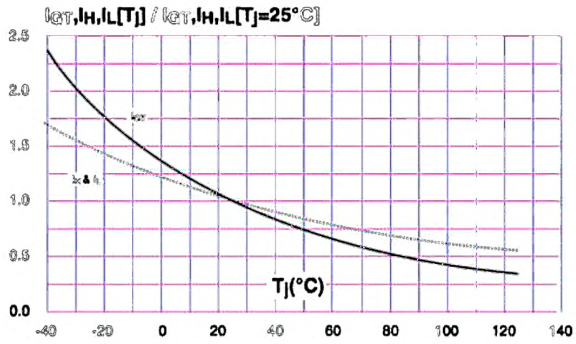
4. Forward Voltage-Current Characteristics Curve



5. Surge Current and Frequency Curve



I TSM - t, I2t - t curve



7. Gate Trigger Characteristic Curve