

Model: BT137

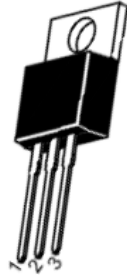
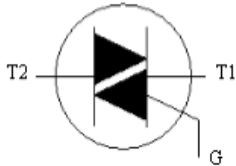
Shape: TO-220AB

Product name: bidirectional thyristor

Outline of TO-220AB

Polarity: T1: master terminal 1 T2: master terminal 2 G: trigger pole

Purpose: heating controller; Dimming/speed control controller; Colored light controller; Automatic mahjong machine; Blender; Juice machine; Household appliances such as toasters



Main parameter (Tj=25°C)

Project	Symbol	value	Unit
On-state mean current	IT (RMS)	8	A
Off-state/reverse repeat voltage	VDRM/VRRM	≥600	V
On-state surge current	ITSM	65	A

Limit range (TA=25°C unless otherwise specified)

Project	Symbol	Rated value	Unit
On-state square mean-root current (complete sine wave)	IT (RMS)	8	A
On-state no repeat surge current	ITSM	65	A
Control pole peak dissipative current	IGM	2	A
Control pole peak dissipated power	PGM	5	W
Control pole average dissipated power	PG (AV)	0.5	W
Storage temperature	Tstg	-40~150	°C
Knot temperature	Tj	125	°C

Electrical parameter characteristics (TA=25°C unless otherwise specified)

Parameter		Symbol	Test condition	Mini	Typical	Max	Unit
Gate trigger current	I	IGT	T2(+), G(+)	Vd=12v IT=0.1A	2.5	10	mA
	II		T2(+), G(-)		4	10	mA
	III		T2(-), G(-)		5	10	mA
	IV		T2(-), G(+)		11	25	mA
Maintain current		IH	VD=12V IG=100mA		2.5	20	mA
On-state voltage		VTM	IT=10A		1.3	1.65	V
Off-state repeating peak current		IDRM	VDRM=620V		10		uA
Reverse repeat peak current		IRRM	VRRM=620V		10		uA
Gate trigger voltage		VGT	VD=12V IT=100mA		0.7	1.5	V
Holding current	I	IL	T2(+), G(+)	Vd=12v IT=0.1A	3	25	mA
	II		T2(+), G(-)		14	35	mA
	III		T2(-), G(-)		3	25	mA
	IV		T2(-), G(+)		4	35	mA