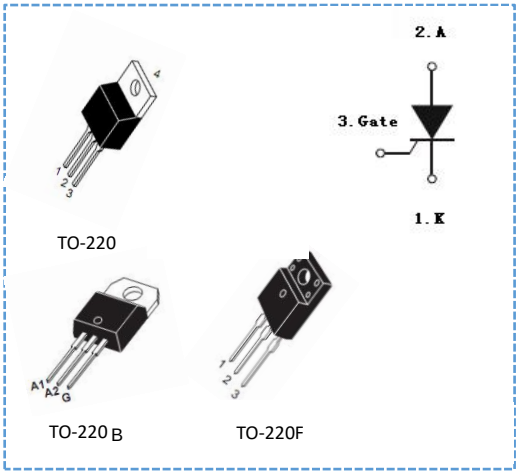
BT151-500R

◆ 用 途

专门应用于各种万能开关器、小型马达控制器、漏电保护器、灯具继电器、激励器、逻辑集成电路驱动、大功率可控硅门极驱动等线路功率控制。



◆ 特 征

采用先进的玻璃钝化工艺，较低的通态压降，高的可靠性、稳定性

◆ 极限值

名　　称	符 号	规范值	单 位	测试条件
断态重复峰值电压	V_{DRM}/V_{RRM}	600/800	V	
通态均方根电流	$I_{T(RMS)}$	12	A	T_c=105℃
浪涌电流	I_{TSM}	100	A	正弦波　60Hz　t=10ms
	I^2t	50	A^2s	t_p=10ms
通态电流临界上升率	dI/dt	50	A/μs	I_{TM}=50A　I_G=0.2A　dI_G/dt=0.2 A/μs
门极峰值电流	I_{GM}	2	A	T_j=125℃　t_p=20μs
门极峰值电压	V_{GM}	5	V	T_j=125℃
门极峰值功率	P_{GM}	5	W	T_j=125℃
平均门极功率	$P_{G(AV)}$	0.5	W	T_j=125℃
结温	T_j	125	℃	
贮存温度	T_{stg}	-40~150	℃	

◆ 电特性

名　　称	符 号	测 试 条 件		BT151	单位
断态重复峰值电流	I_{DRM}	$V_{DRM}=V_{RRM}$　T_j=25℃	MAX	5	μA
		$V_{DRM}=V_{RRM}$　T_j=125℃	MAX	1	mA
通态电压	V_{TM}	I_T=23A　T_j=25℃	MAX	1.7	V
维持电流	I_H	V_D=12V　I_G=100mA	MAX	20	mA
擎住电流	I_L	V_D=12V　I_G= 100mA	MAX	40	mA
门极触发电流	I_{GT}	V_D=12V　I_T=0.1A	MAX	15	mA
门极触发电压	V_{GT}			1.3	V
断态电压临界上升率	dV/dt	V_{DM}=67%V_{DRM}　Gate open　T_j=125℃	MIN	130	V/μs

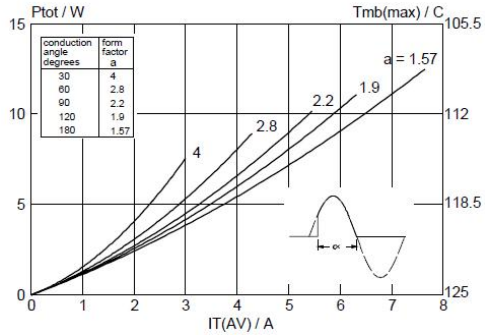
◆ 产品包装

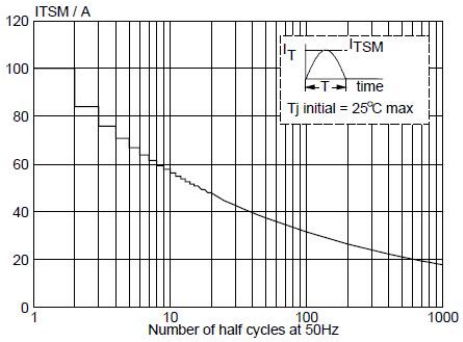
封装形式	数 量	包装材质
TO-220/B	管装：50/条、1000/盒、5000/箱	盒/箱
	袋装：250/袋、2.5K/盒、10K/箱	
发货方式	快　递	

◆产品保管条件

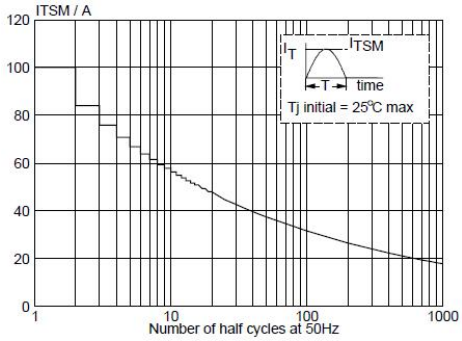
温度	10-30℃
湿度	<60%
放置期限	一年
保管状态	仓储

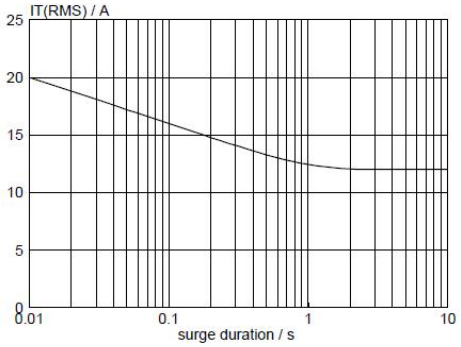
◆ 特性数据

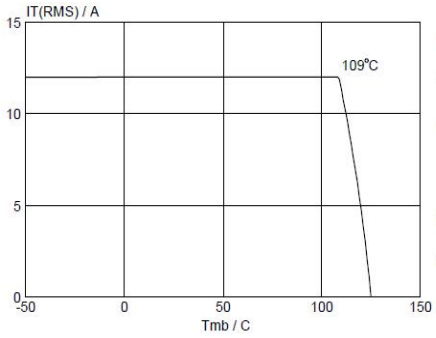


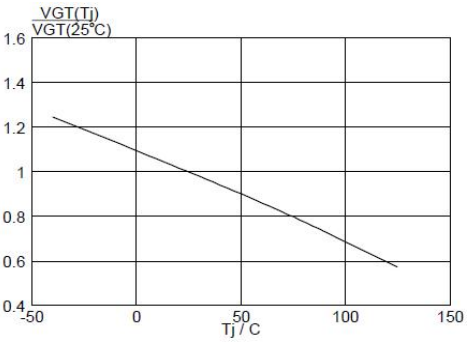


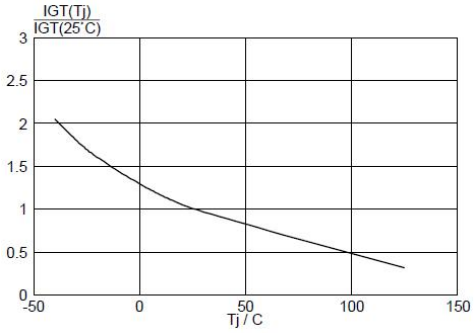
V_T/A

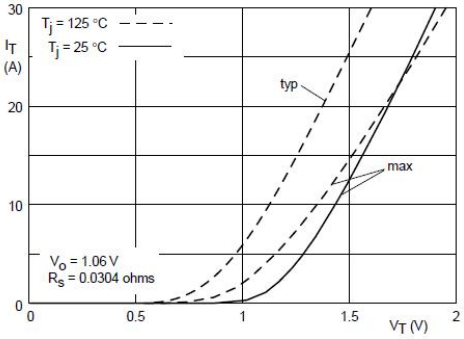


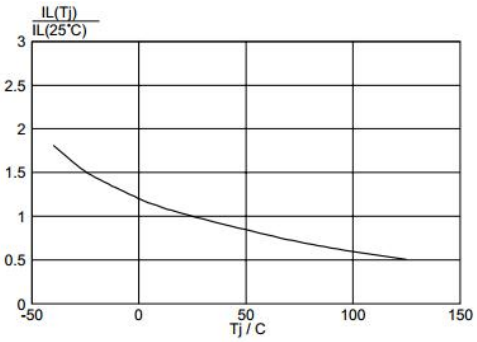


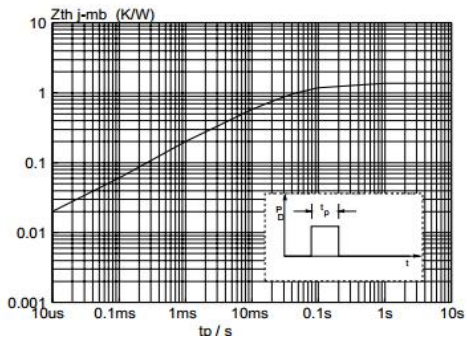


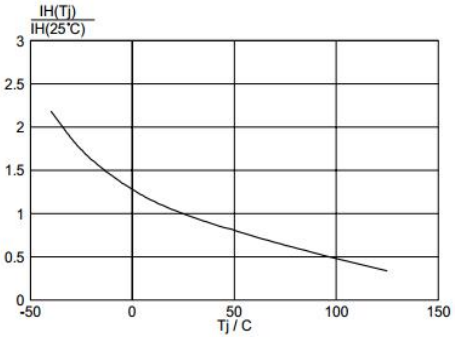


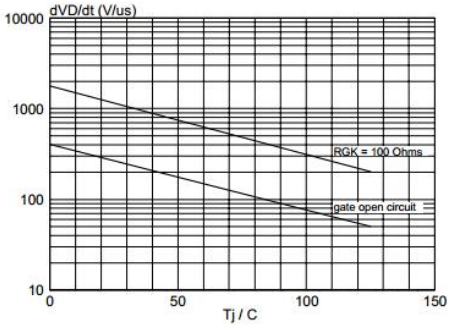




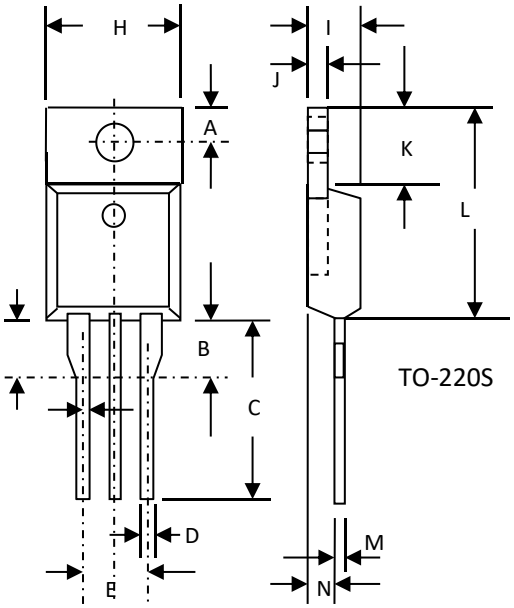




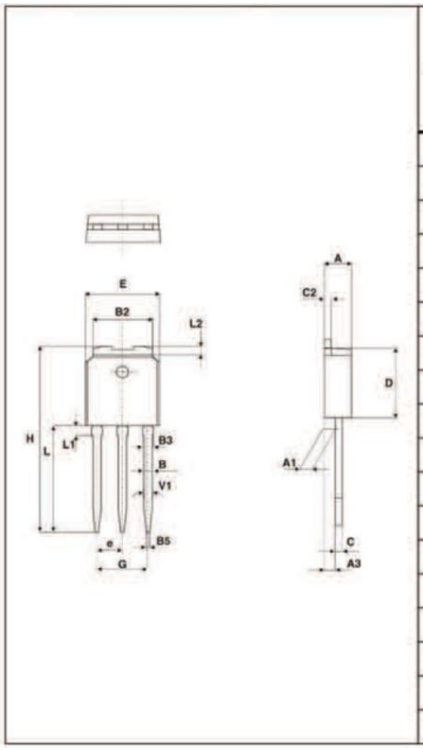




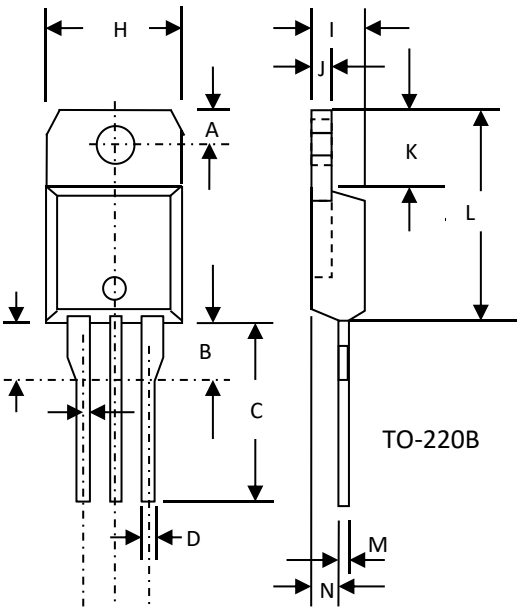
◆ 产品尺寸



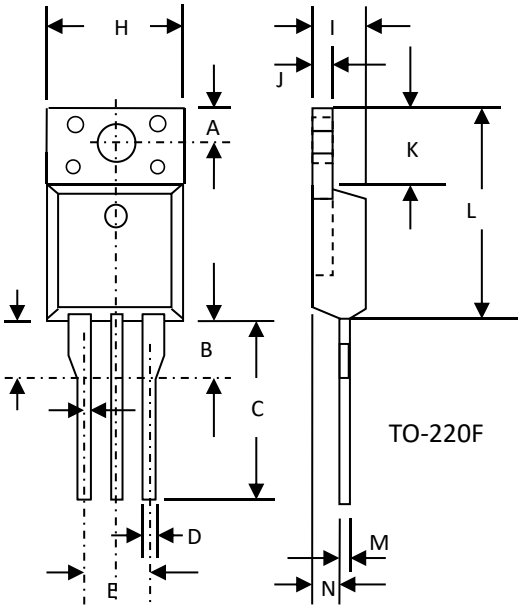
REF.	DIMENSIONS	REF.	DIMENSIONS
	Millimeters		Millimeters
	Type(max)		Type(max)
A	2.8±0.05	I	4.65±0.05
B	3.67±0.02	J	1.28±0.02
C	13.65±0.05	K	6.4±0.02
D	0.8	L	15.15±0.02
E	5.0	M	0.4±0.02
H	10.25±0.05	N	2.73±0.02



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.094
A1	0.90		1.10	0.035		0.043
A3	0.70		1.30	0.027		0.051
B	0.64		0.90	0.025		0.035
B2	5.20		5.40	0.204		0.212
B3			0.95			0.037
B5		0.30			0.035	
C	0.45		0.60	0.017		0.023
C2	0.48		0.60	0.019		0.023
D	6		6.20	0.236		0.244
E	6.40		6.60	0.252		0.260
e		2.28			0.090	
G	4.40		4.60	0.173		0.181
H		16.10			0.634	
L	9		9.40	0.354		0.370
L1	0.8		1.20	0.031		0.047
L2		0.80	1		0.031	0.039
V1		10°			10°	



REF.	DIMENSIONS	REF.	DIMENSIONS
	Millimeters		Millimeters
	Type		Type
A	3.03±0.05	I	4.45±0.05
B	3.6±0.02	J	1.28±0.02
C	14.33±0.05	K	6.56±0.02
D	0.83	L	15.41±0.02
H	10.02±0.05	M	0.5±0.05
		N	2.72±0.02



REF.	DIMENSIONS	REF.	DIMENSIONS
	Millimeters		Millimeters
	Type		Type
A	3.35±0.03	I	4.72±0.01
B	3.3±0.03	J	2.63±0.02
C	12.77±0.03	K	6.8±0.01
D	0.8±0.01	L	15.7±0.03
E	5.06±0.02	M	0.5±0.05
H	10.12±0.03	N	2.4±0.02