

产 品 规 格 书

批 准	审 核	校 核	编 制
纪春华	/	朴致均	郑羿
2018.05.22	/	2018.05.22	2018.05.22

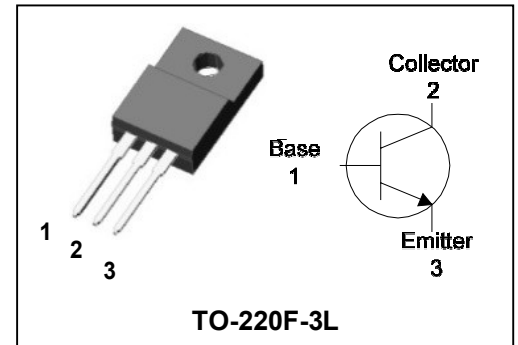
规格书更改履历:

序号	更改内容	履历号	更改时间	责任人
1	新规制定	000	2018.05.22	郑羿

Features

- Power Transistor General Purpose application
通用型功率晶体管
- Low saturation voltage : $V_{CE(SAT)}=0.4V$ Typ
低的饱和电压: $V_{cesat}=0.4V$ Typ.
- High Voltage : $V_{CEO}=60V$ Min.
高电压: $V_{ceo}=60V$ Min

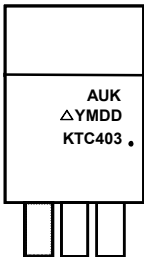
PIN Connection



Ordering Information 订购信息

Type NO.	Marking	Package Code
KTC403F	KTC403.	TO-220F-3L

Marking Diagram 标记名

	<p>Column 1 : Manufacturer</p> <p>Column 2 : Production Information - Δ : Factory Management Code - YMDD : Date Code (Year, Month, Date)</p> <p>Column 3 : Device Code .: Da Lian</p>
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Absolute maximum ratings 绝对最大额定参数

Characteristic	Symbol	Rating	Unit
Collector-base voltage 集电极-基极电压	V_{CBO}	80	V
Collector-emitter voltage 集电极-发射极电压	V_{CEO}	60	V
Emitter-base voltage 发射极-基极电压	V_{EBO}	5	V
Collector current 集电极电流	I_C	3	A
Collector power dissipation (Tc=25°C) 集电极功耗	P_C	15	W
Junction temperature 结温	T_j	150	°C
Storage temperature 存储温度	T_{stg}	-55~150	°C

Characteristic		Symbol	Typ.	Max.	Unit
Thermal resistance	Junction-case	$R_{th(J-C)}$	-	8.33	°C/W

Electrical Characteristics 电特性

Characteristic		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage		BV_{CEO}	$I_C=50mA, I_B=0$	60	-	-	V
Collector cut-off current		I_{CBO}	$V_{CB}=60V, I_E=0$	-	-	50	μA
Emitter cut-off current		I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	50	μA
DC current gain		h_{FE}^*	$V_{CE}=5V, I_C=0.5A$	200	-	400	-
Base-emitter on voltage		$V_{BE(ON)}$	$V_{CE}=5V, I_C=0.5A$	-	0.7	1	V
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$	-	0.4	1	V
Transition frequency		f_T	$V_{CB}=5V, I_C=0.5A$	-	30	-	MH
Collector output capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	20	-	pF
Switching Time	Turn-on Time	T_{on}		-	0.65	-	μS
	Storage Time	T_{stg}		-	1.3	-	
	Fall Time	T_f		-	0.65	-	

* h_{FE} rank : 200~400 Only

Electrical Characteristic Curves 电特性曲线

Fig. 1 $P_C - T_a$

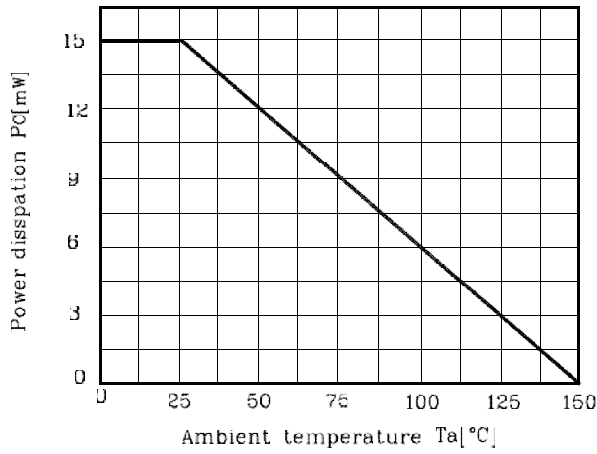


Fig. 2 $V_{CE(sat)} - I_C$

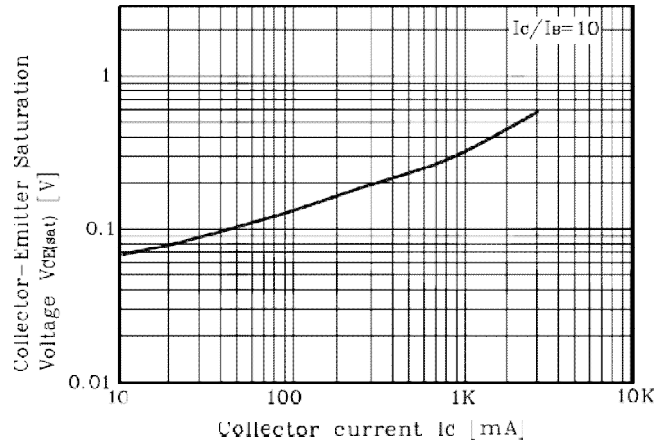


Fig. 3 $h_{FE} - I_C$

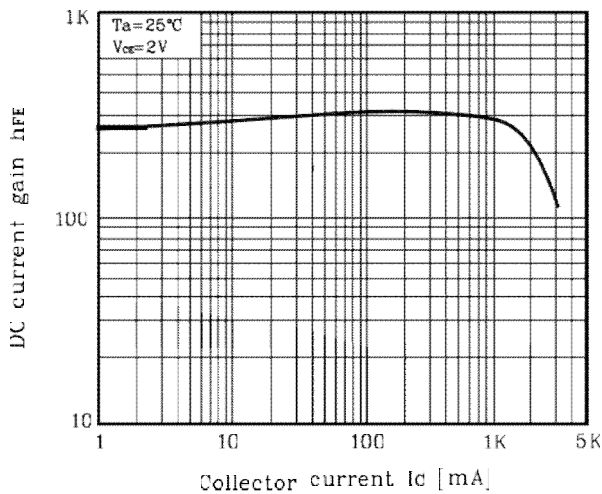


Fig. 4 $I_C - V_{CE}$

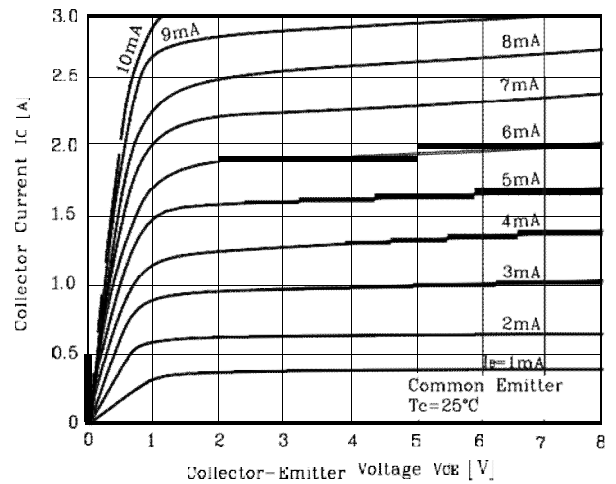
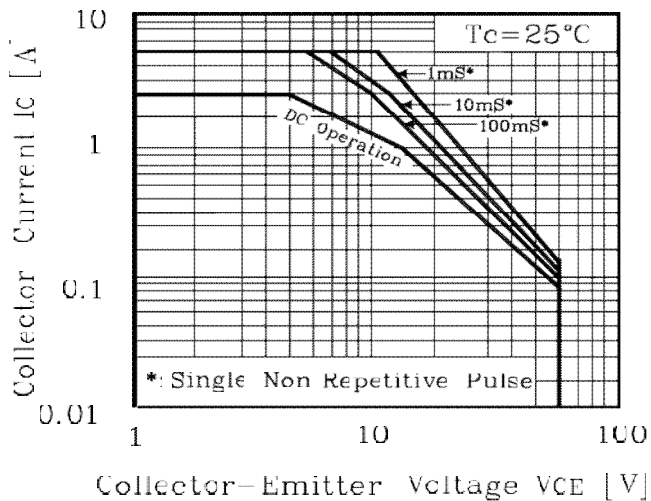
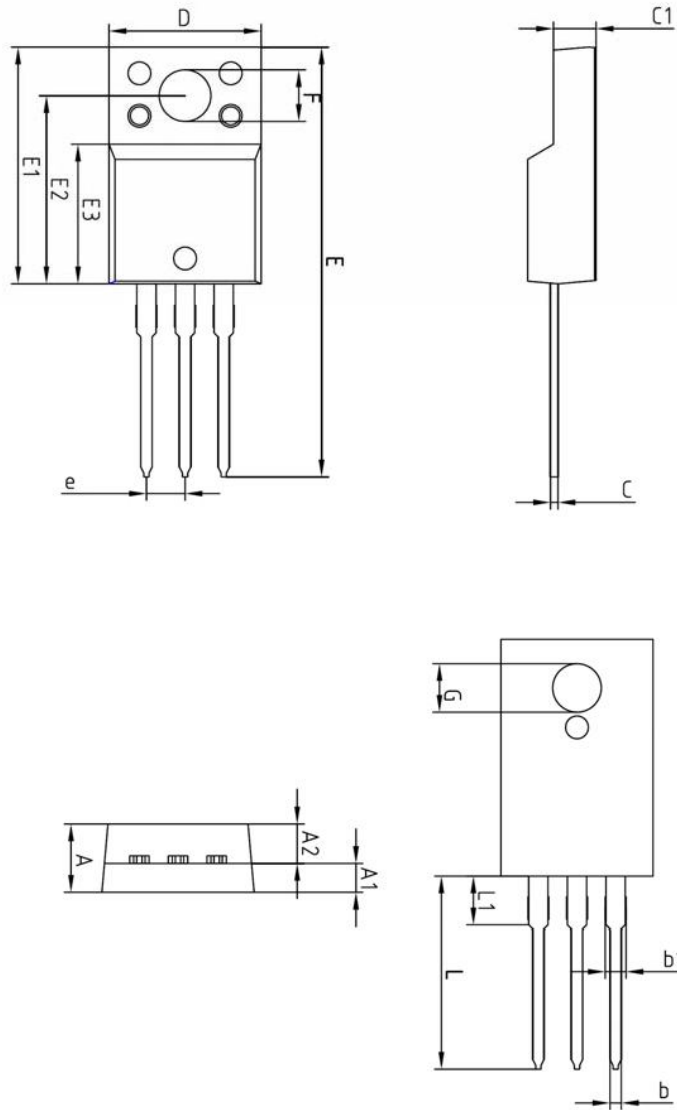


Fig. 5 Safe Operating Area



Outline Dimension 外形尺寸



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	—	—	4.60	
A1	2.45	2.50	2.55	
A2	1.95	2.00	2.05	
b	0.65	0.75	0.85	
b1	1.07	1.27	1.47	
C	0.40	0.50	0.60	
C1	2.70	2.80	2.90	
D	9.90	10.00	10.10	
E	28.00	—	28.60	
E1	15.50	15.60	15.70	
E2	12.30	12.40	12.50	
E3	9.15	9.20	9.25	
F	3.30	3.40	3.50	
G	3.10	3.20	3.30	
e	2.54 BSC			
L	12.40	—	13.00	
L1	3.46 BSC			

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