TECH PUBLIC
台舟电子

MJD127K3

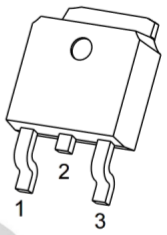
Complementary Darlington Power Transistor

WWW.TECHPUBLIC.COM

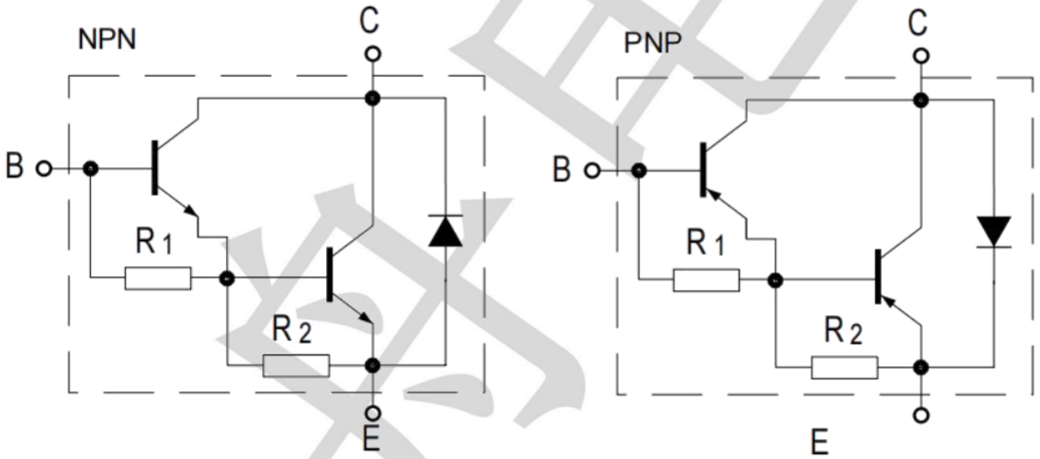
Features

- High DC Current Gain
- Electrically Similar to Popular TIP127
- Built-in a Damper Diode at E-C
- TRANSISTOR (PNP)

TO-252-2L



1. BASE
2. COLLECTOR
3. EMITTER



R_1 typ. =5 K R_2 typ. =210

R_1 typ. =5 KΩ R_2 typ. =210Ω

Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-8	A

WWW.SOT23.COM.TW

MJD127K3

Complementary Darlington Power Transistor

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	1.5	**W**
Operating Junction Temperature Range	T_J	-55 ~ +150	**°C**
Storage Temperature Range	T_{STG}	-55 ~ +150	**°C**

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Collector-base breakdown voltage	IC=-1mA,IE=0	V(BR)CBO	-100	--	--	**V**
Collector-emitter breakdown voltage	IC=-30mA,IB=0	V(BR)CEO	-100			**V**
Emitter-base breakdown voltage	IE=-10mA,IC=0	V(BR)EBO	-5			**V**
Collector cut-off current	VCB=-100V,IE=0	ICBO			-10	**μA**
Collector-emitter cut-off current	VCE=-50V,IB=0	ICEO			-10	**μA**
Emitter cut-off current	VEB=-5V,IC=0	IEBO			-2	**mA**
DC current gain	VCE=-4V,IC=-4A	hFE(1)	1000		12000	
	VCE=-4V,IC=-8A	hFE(2)	100			
Collector-emitter saturation voltage	IC=-4A,IB=-16mA	VCE(sat) 1*			-2	**V**
	IC=-8A,IB=-80mA	VCE(sat) 2*			-4	**V**
Base-emitter saturation voltage	IC=-8A,IB=-80mA	VBE(sat) *			-4.5	**V**
Base-emitter voltage	VCE=-4V,IC=-4A	VBE*			-2.8	**V**
Collector output capacitance	VCB=-10V,IE=0,f=0.1MHz	Cob			300	**pF**

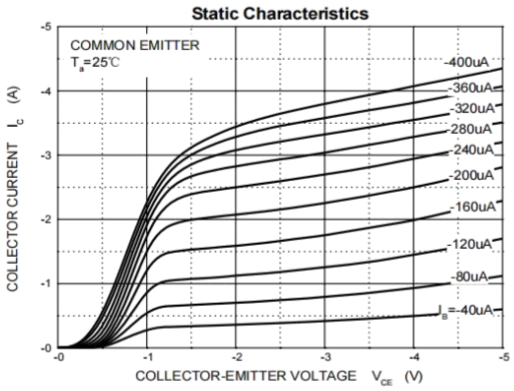
*Pulse Test: Pulse Width≤380μs, Duty Cycle≤2%

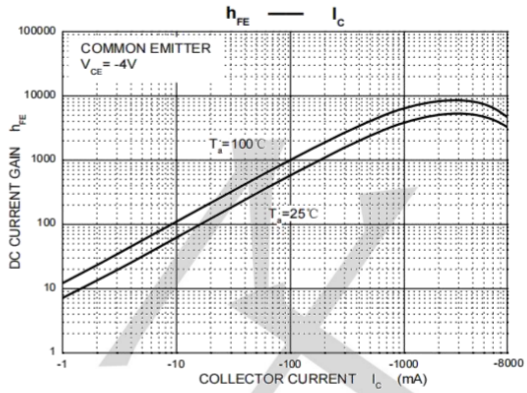
WWW.SOT23.COM.TW

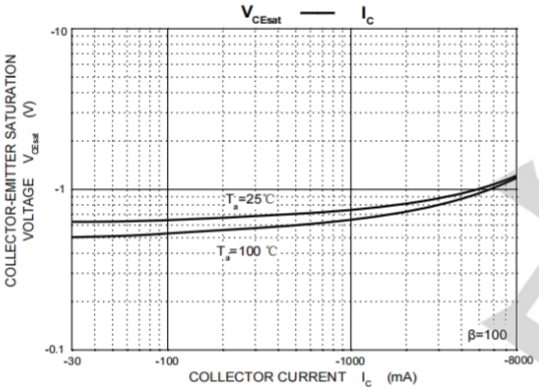
MJD127K3

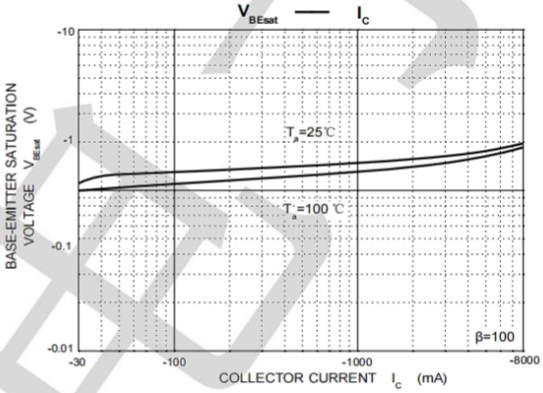
Complementary Darlington Power Transistor

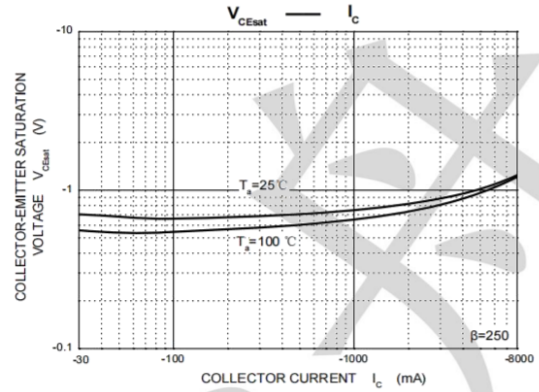
Typical Performance Characteristics(TA=25°C unless otherwise Specified)

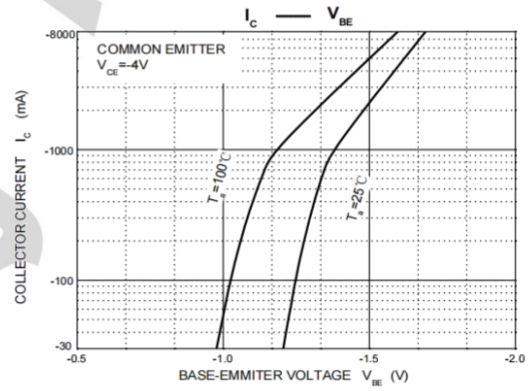


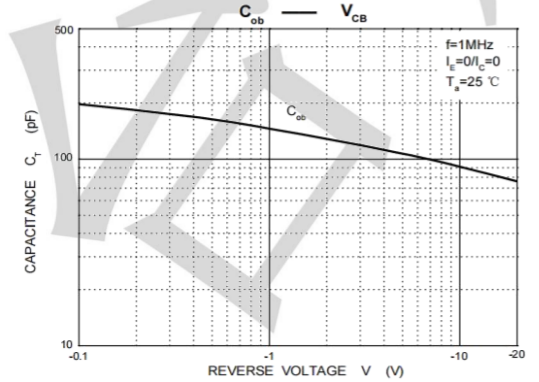


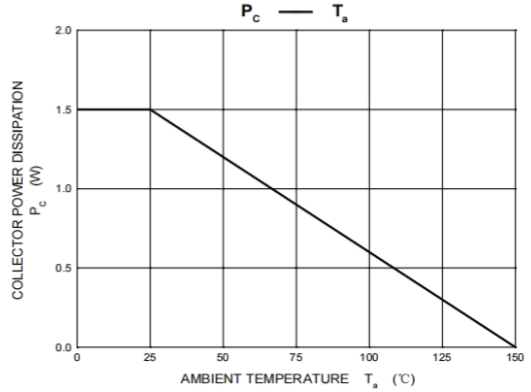










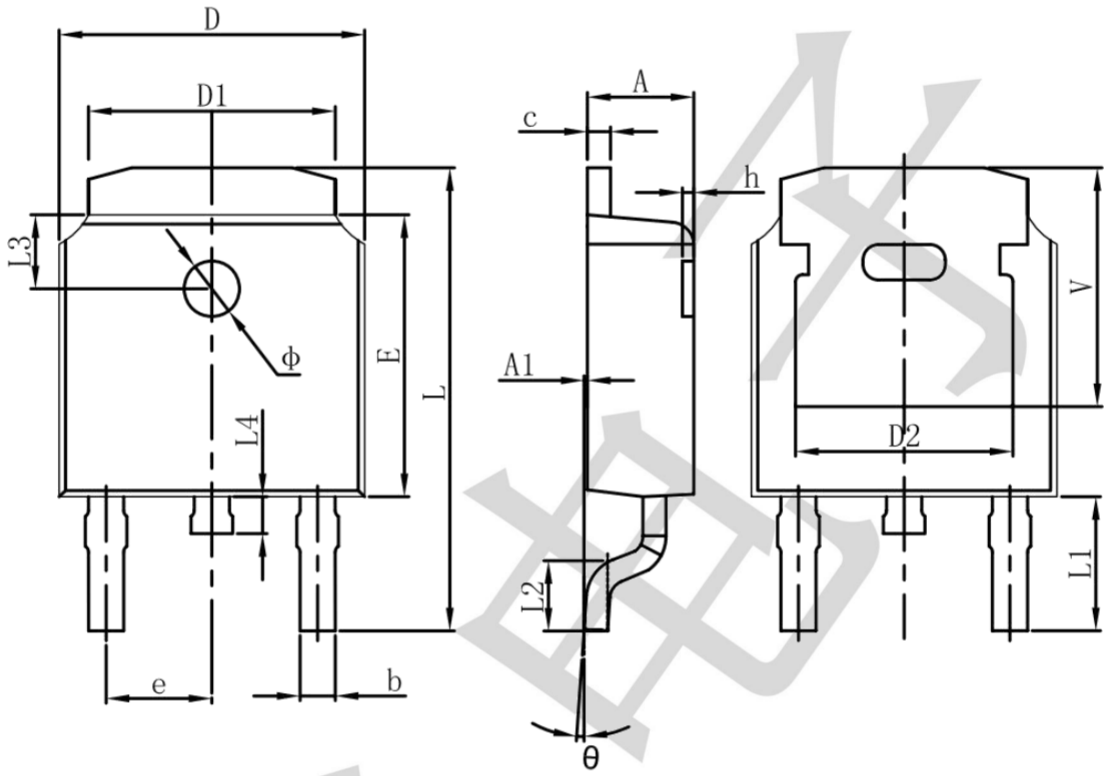


MJD127K3

Complementary Darlington Power Transistor

Package Outline Dimensions

TO252-2L



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

WWW.SOT23.COM.TW