

Silicon NPN Power Transistors

2SD1115K

DESCRIPTION

www.datasheet4u.com

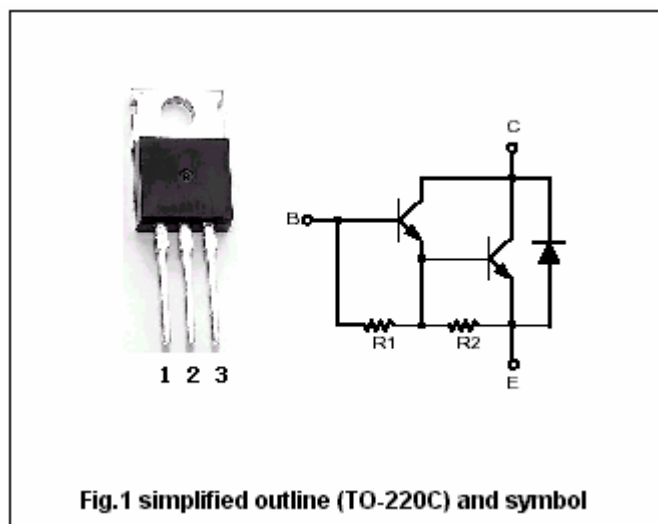
- With TO-220 package
- DARLINGTON

APPLICATIONS

- For high voltage switching and ignitor applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	400	V
V_{CEO}	Collector-emitter voltage	Open base	300	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		3	A
I_{CM}	Collector current-Peak		6	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon NPN Power Transistors

2SD1115K

CHARACTERISTICS

Tj=25°C unless otherwise specified

www.datasheet4u.com

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =2A ; PW=50μs f=50Hz, L=10mH	300			V
V _{CBO}	Collector-base breakdown voltage	I _C =0.1A, I _E =0	400			V
V _{EBO}	Emitter-base breakdown voltage	I _E =50mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =20mA			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A; I _B =20mA			2.0	V
I _{CEO}	Collector cut-off current	V _{CE} =300V; R _{BE} =∞			0.1	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =2V	500			

Switching times

t _{on}	Turn-on time	I _C =2A; I _{B1} =- I _{B2} =20mA		1.0		μs
t _{off}	Turn-off time			22		μs

Silicon NPN Power Transistors

2SD1115K

PACKAGE OUTLINE

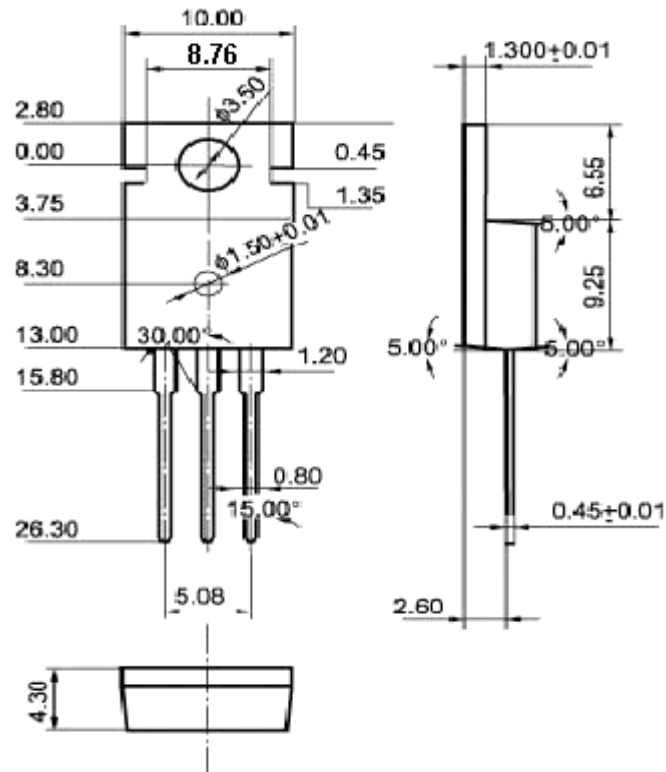
www.datasheet4u.com

Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)