2SD601A

Silicon NPN Power Transistor

DESCRIPTION

· Collector-Emitter Breakdown Voltage

$-V_{(BR)CEO}$= 50V(Min)

· Collector-Emitter Saturation Voltage

$-V_{CE(sat)}$:0.3V(Max) @I_C=0.1A

APPLICATIONS

· Switching Regulators

· Converters

· Power Amplifiers

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	0.1	A
I_{CP}	Collector Current-Pulse	0.2	A
P_C	Total Power Dissipation @ Ta=25℃	0.2	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

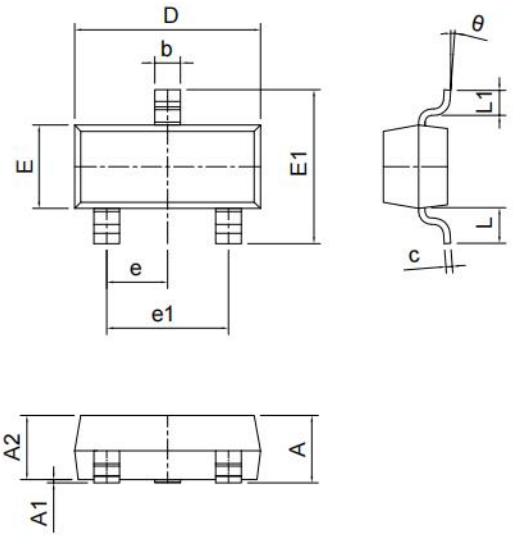
ELECTRICAL CHARACTERISTICS （T_C=25℃ unless otherwise specified）

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_{CBO}	Collector-base voltage	I_C= 20uA, I_E= 0	60	--	--	V
V_{CEO}	Collector-emitter voltage	I_C= 2mA, I_B= 0	50	--	--	V
V_{EBO}	Emitter-base voltage	I_E= 10uA, I_E= 0	7	--	--	V
I_{CBO}	Collector-base current	V_{CB}= 20V, I_E= 0	--	--	0.1	uA
I_{CEO}	Collector-emitter current	V_{CE}= 10V, I_B= 0	--	--	100	uA
h_{FE}	DC Current Gain	I_C= 2mA, V_{CE}= 10V	160	--	460	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=100mA, I_B= 10mA	--	0.1	0.3	V

◆ hFE Classifications

ZQ	ZR	ZS
160-260	210-340	290-460

PACKAGE OUTLINE Dimensions in mm (1mm = 0.0394)



SYMBOL	MIN.	TYP	MAX.
A	0.90	1.03	1.13
A1	0.00	0.05	0.10
A2	0.90	1.00	1.10
b	0.30	0.40	0.50
c	0.08	0.11	0.15
D	2.80	2.90	3.00
E	1.20	1.30	1.40
E1	2.35	2.45	2.55
e	0.90	0.95	1.00
e1	1.80	1.90	2.00
L	0.50	0.58	0.65
L1	0.30	0.40	0.50
θ		4°	

PRODUCT DISCLAIMER

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

It is strictly prohibited to reprint or copy part or all of this datasheet without permission from ISC.