

isc Silicon NPN Power Transistor

2SC3588

DESCRIPTION

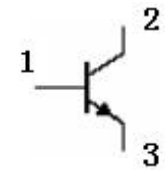
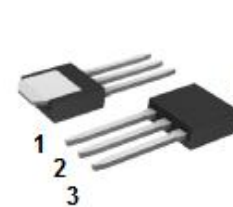
- Low Collector Saturation Voltage-
 $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 300\text{mA}$
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 400V(\text{Min})$
- Complement to Type 2SA1400
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high Voltage switching applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	0.5	A
I_{CM}	Collector Current-Pulse	1	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	2	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



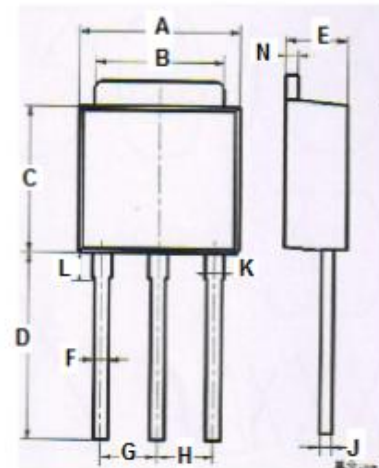
pin 1.Base

2.Collector

3.Emitter

IPAK

TO-251 package



DIM	mm	
	MIN	MAX
A	6.40	6.48
B	5.10	5.50
C	5.80	6.20
D	9.20	9.60
E	2.20	2.40
F	0.50	0.70
G	2.09	2.49
H	2.09	2.49
J	0.40	0.60
K	0.70	0.90
L	1.60	2.00
N	0.40	0.60

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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$; $I_B=0$	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=300\text{mA}$; $I_B=60\text{mA}$			0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=300\text{mA}$; $I_B=60\text{mA}$			1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=400\text{V}$; $I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=50\text{mA}$; $V_{CE}=5\text{V}$	20		80	
h_{FE-2}	DC Current Gain	$I_C=0.3\text{A}$; $V_{CE}=5\text{V}$	10			

◆ h_{FE} Classifications

M	L	K
20-40	30-60	40-80

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