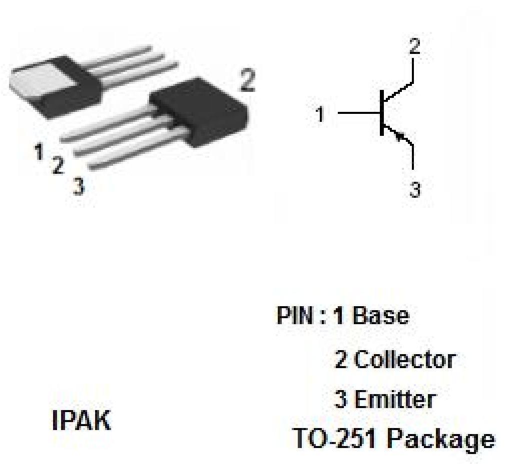
isc Silicon PNP Power Transistor 2SA1593

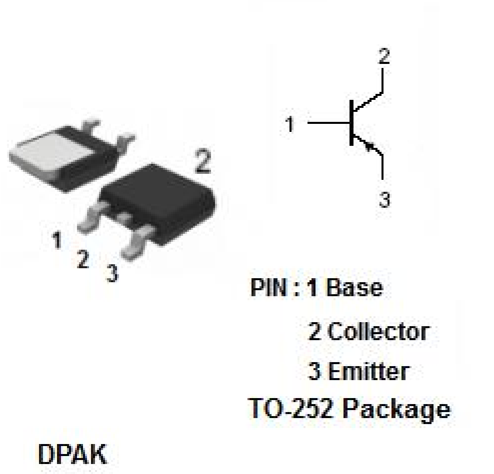
DESCRIPTION

- High breakdown voltage and large current capacity
- Fast switching speed
- Small and slim package permitting
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation
- Complementary to 2SC4135

APPLICATIONS

- Power supplies, relay drivers,lamp drivers.





ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-2	A
I_{CM}	Collector Current-Peak	-3	A
P_C	Collector Power Dissipation @ T_C=25℃	15	W
	Collector Power Dissipation @T_a=25℃	1.0	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

ELECTRICAL CHARACTERISTICS

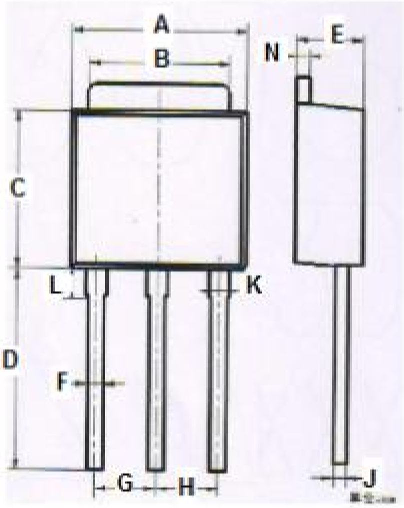
T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -1.0A; I_B= -0.1A			-0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -1.0A; I_B= -0.1A			-1.2	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -1mA; I_B= 0	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -10uA; I_C= 0	-6			V
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V; I_E= 0			-100	nA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -4V; I_C= 0			-100	nA
h_{FE}	DC Current Gain	I_C= -0.1A; V_{CE}= -5V	100		400	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1.0MHz		25		pF
f_T	Current-Gain—Bandwidth Product	I_C= -0.1mA; V_{CE}= -10V		120		MHz

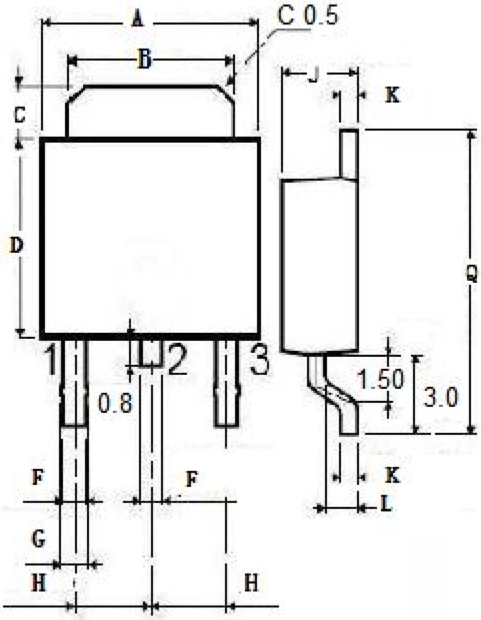
◆ **h_{FE} Classifications**

R	S	T
100-200	140-280	200-400

Outline Drawing



	mm	
DIM	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



	mm	
DIM	MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1