

isc Silicon PNP Power Transistor
2SA1593
DESCRIPTION

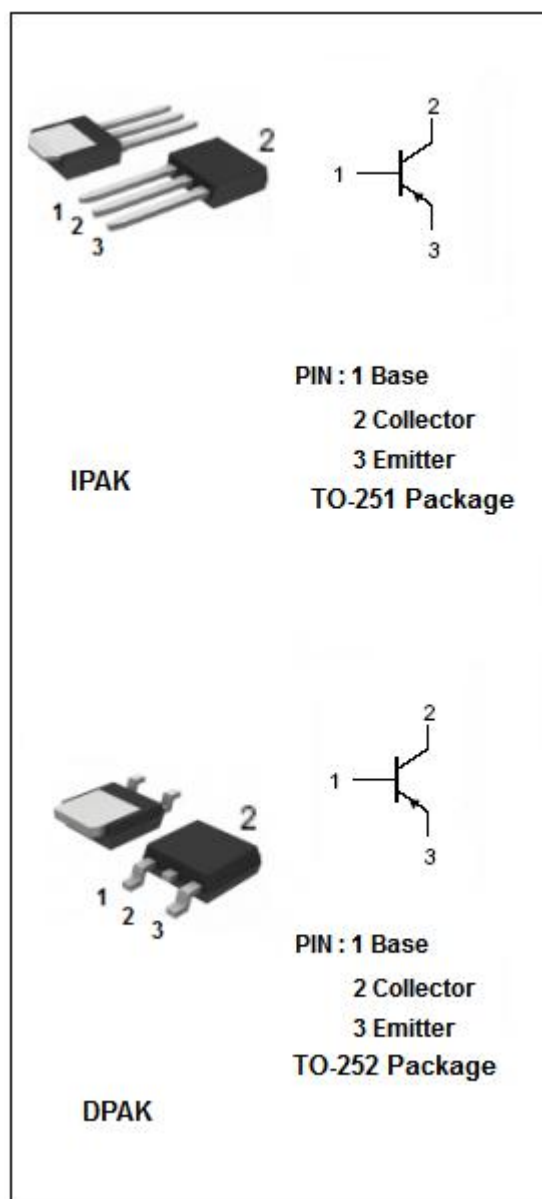
- High breakdown voltage and large current capacity
- Fast switching speed
- Small and slim package permitting
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation
- Complementary to 2SC4135

APPLICATIONS

- Power supplies, relay drivers, lamp drivers.

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

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 @ $T_C=25^{\circ}\text{C}$	15	W
	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	1.0	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C 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 = -10μA; 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

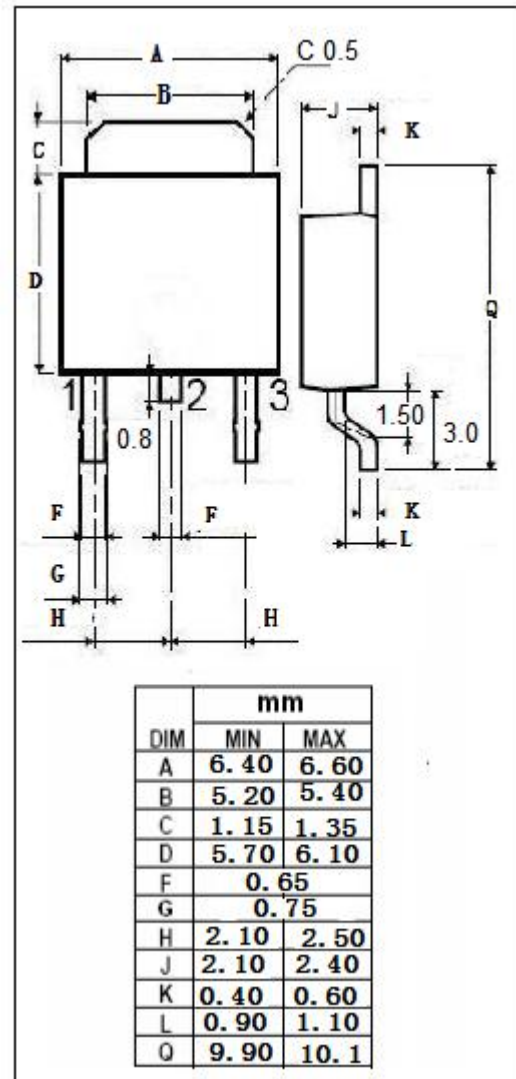
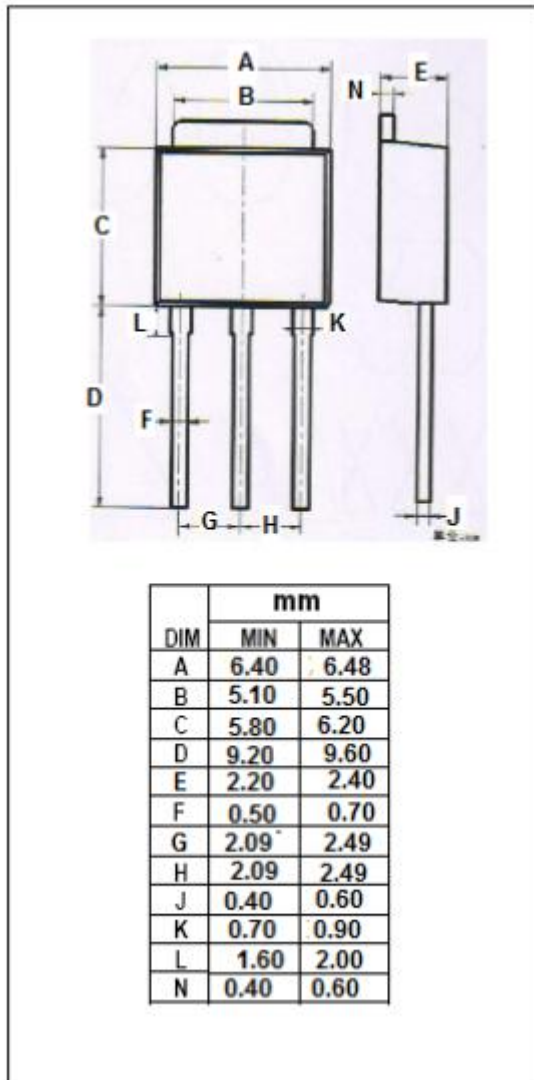
◆ h_{FE} Classifications

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

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Outline Drawing



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