

isc Silicon NPN Power Transistor
2SC2983
DESCRIPTION

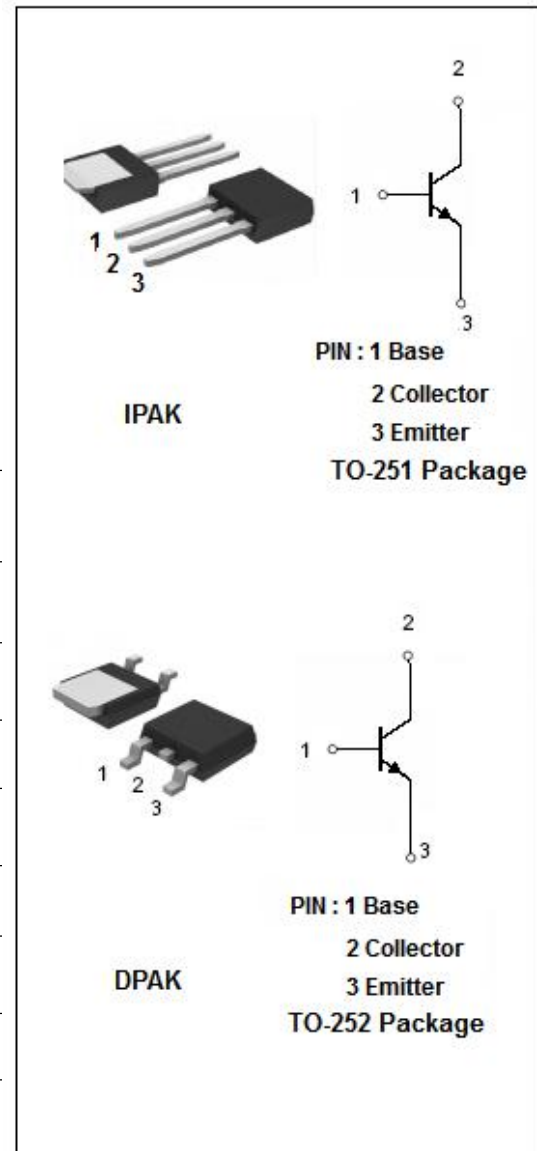
- Excellent linearity of h_{FE}
- Low collector-to-emitter saturation voltage
- Fast switching speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplifier and driver stage amplifier applications .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_B	Base Current-Continuous	0.3	A
P_C	Collector Power Dissipation	15	W
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 = 500mA; I _B = 50mA			1.5	V
V _{BE(on)}	Base-Emitter On Voltage	V _{CE} = 5V; I _C = 500mA			1.0	V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _B = 0	160			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	160			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	5			V
I _{CBO}	Collector Cutoff Current	V _{CB} = 160V; I _E = 0			1	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1	uA
h _{FE}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V	70		240	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f= 1.0MHz		25		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 10V		100		MHz

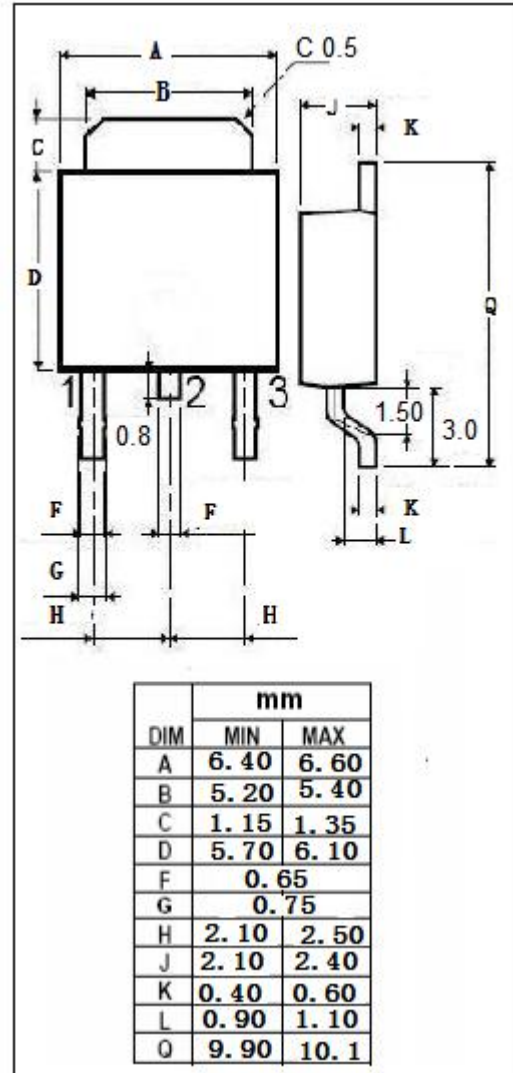
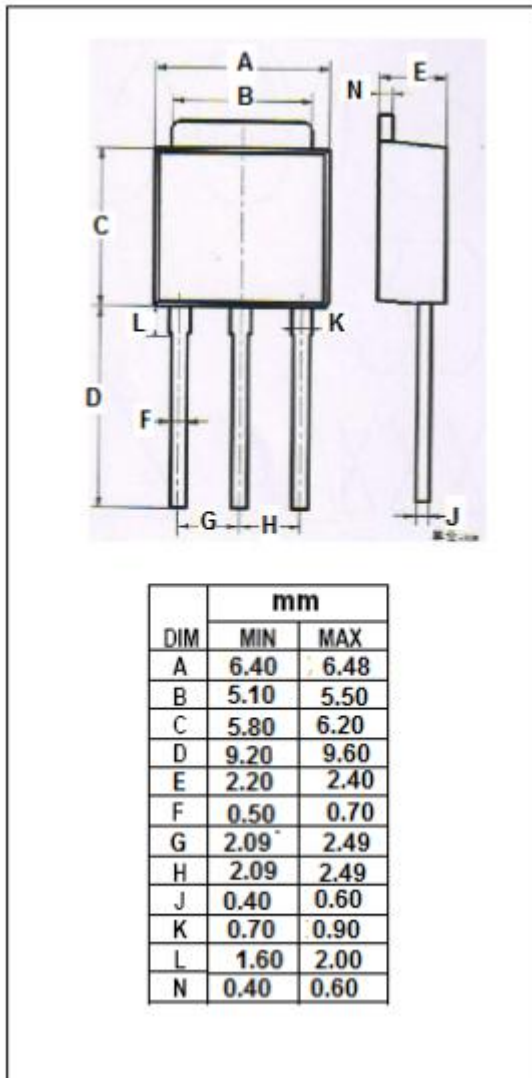
◆ h_{FE1} Classifications

O	Y
70-140	120-240

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Outline Drawing


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