

isc Silicon PNP Power Transistor

2SA1242

DESCRIPTION

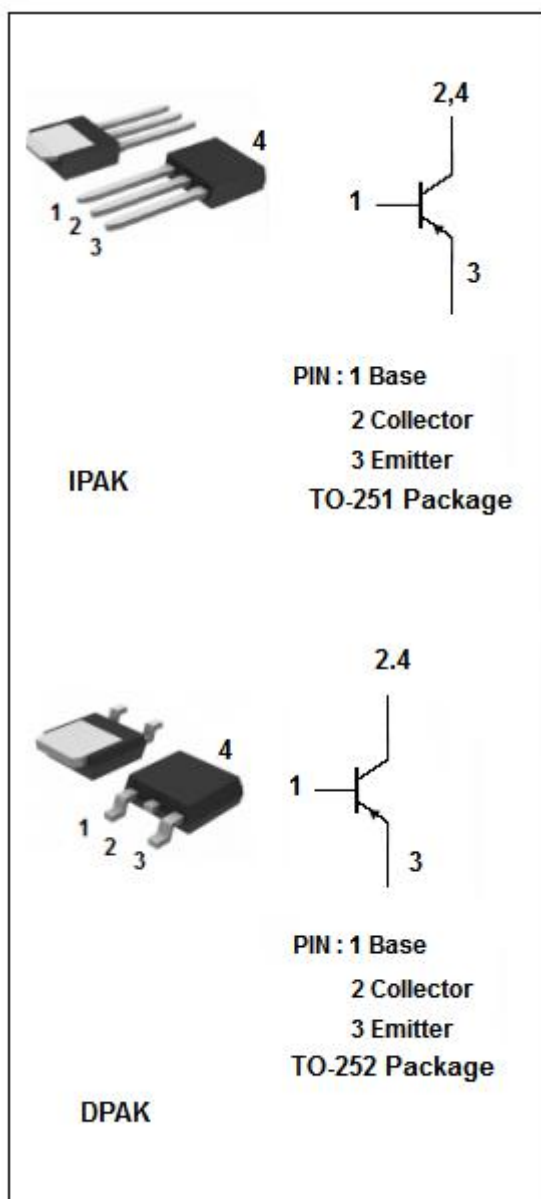
- $h_{FE}=100-320(I_C=-0.5A; V_{CE}=-2V)$
- $h_{FE}=70(\text{Min})(I_C=-4A; V_{CE}=-2V)$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)}=-1.0V(\text{Max})(I_C=-4A; I_B=-0.1A)$
- High Power Dissipation-
: $P_C=10W@T_C=25^\circ C, P_C=10W@T_a=25^\circ C$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For medium power amplifier and strobe flash applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
I_B	Base Current	-0.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	10	W
	Collector Power Dissipation @ $T_a=25^\circ C$	1.0	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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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 = -4A; I _B = -0.1A			-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -4A; V _{CE} = -2V			-1.5	V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA; I _B = 0	-20			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-8			V
I _{CBO}	Collector Cutoff Current	V _{CB} = -35V; I _E = 0			-0.1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -8V; I _C = 0			-0.1	μ A
h _{FE-1}	DC Current Gain	I _C = -0.5A; V _{CE} = -2V	100		320	
h _{FE-2}	DC Current Gain	I _C = -4A; V _{CE} = -2V	70			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1.0MHz		62		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -2V		170		MHz

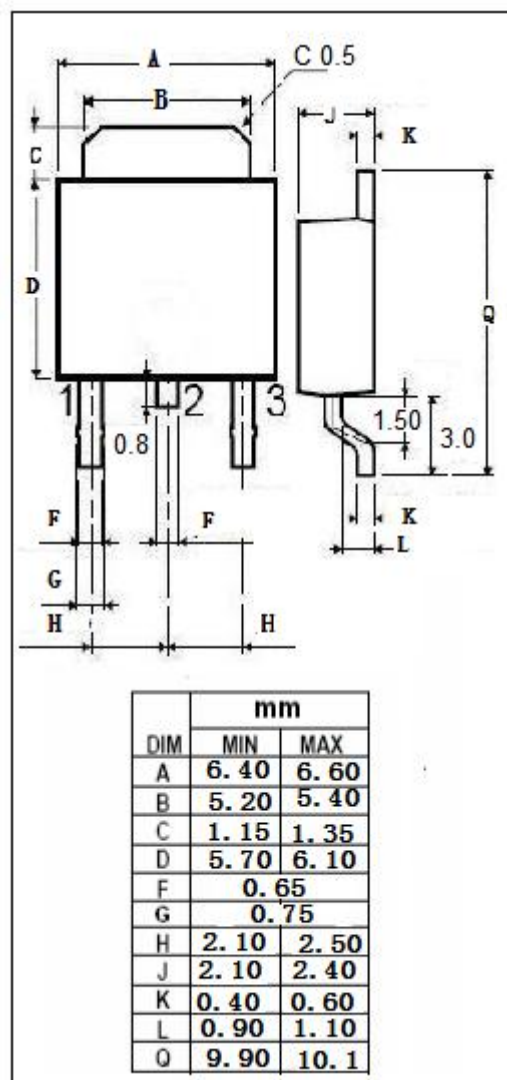
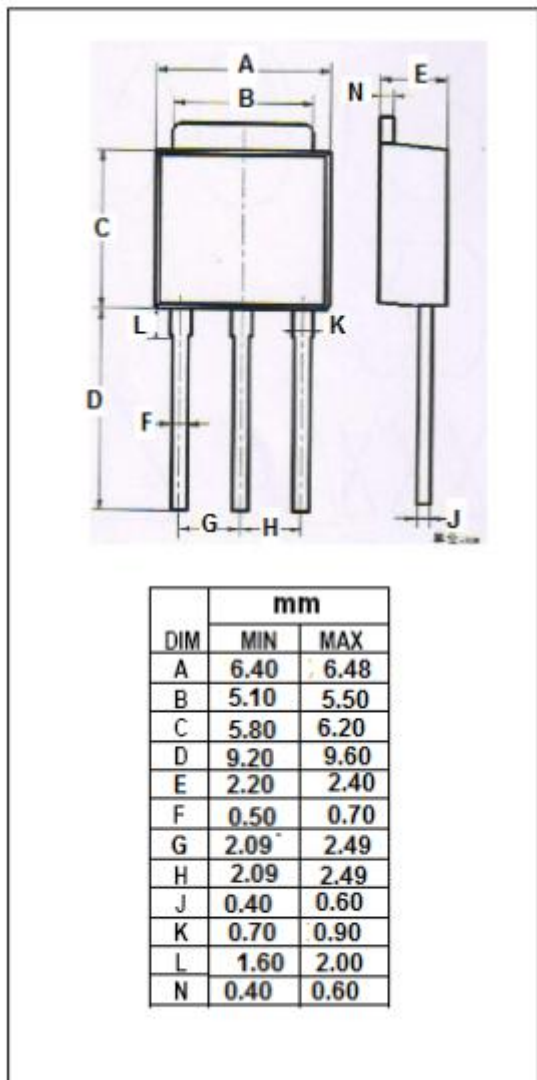
◆ h_{FE} Classifications

O	Y
100-200	160-320

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Outline Drawing



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