

isc Silicon PNP Power Transistor

2SB1202

DESCRIPTION

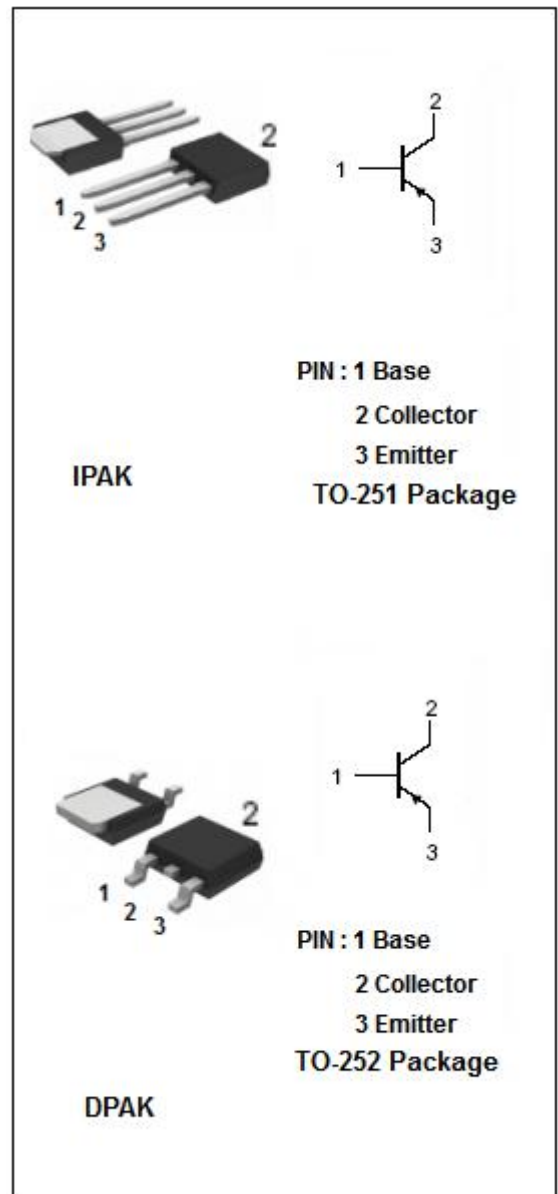
- Large current capacitance and wide ASO
- Low collector-to-emitter saturation voltage
- Fast switching speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Voltage regulators, relay drivers, lamp drivers, electrical equipment

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-3	A
I_{CP}	Collector Current-Pulse	-6	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	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

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -100\text{mA}$			-0.7	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -100\text{mA}$			-1.2	V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -10\mu\text{A}; I_B = 0$	-60			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}; I_B = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}; I_C = 0$	-6			V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40\text{V}; I_E = 0$			-1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-1	μA
h_{FE1}	DC Current Gain	$I_C = -0.1\text{A}; V_{CE} = -2\text{V}$	100		560	
h_{FE2}	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -2\text{V}$	35			
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		39		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -50\text{mA}; V_{CE} = -10\text{V}$		150		MHz

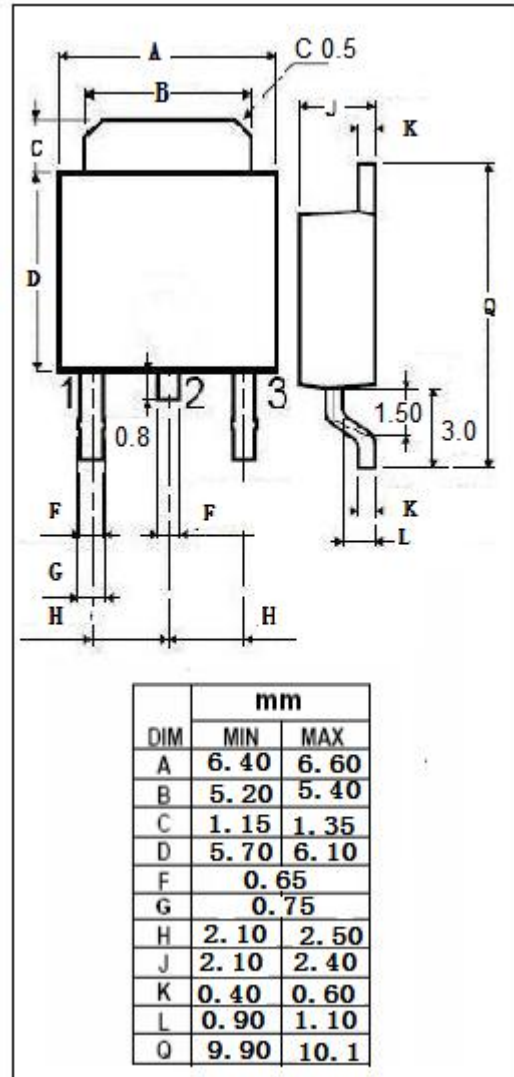
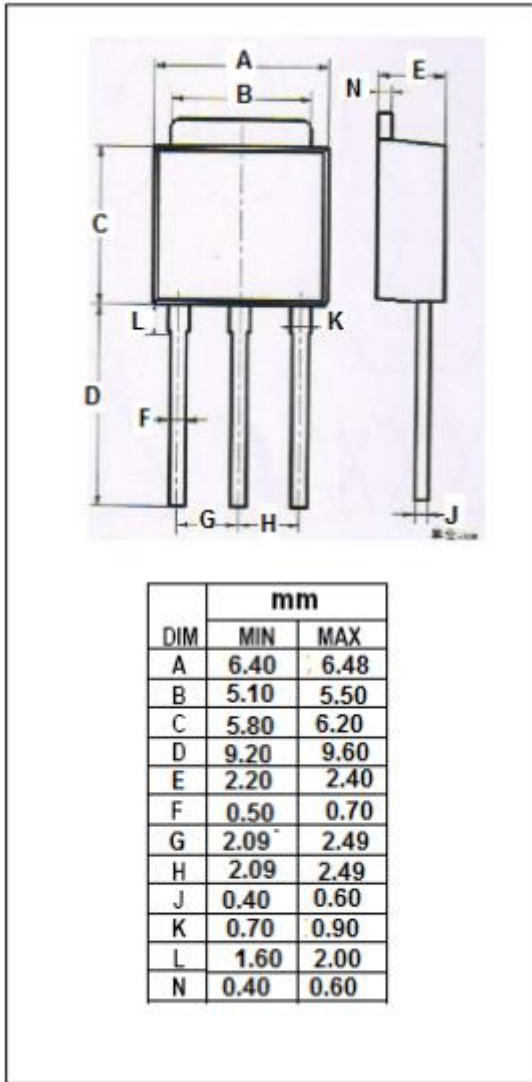
◆ h_{FE1} Classifications

R	S	T	U
100-200	140-280	200-400	280-560

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Outline Drawing



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