

isc Silicon NPN Power Transistor

2SD1758

DESCRIPTION

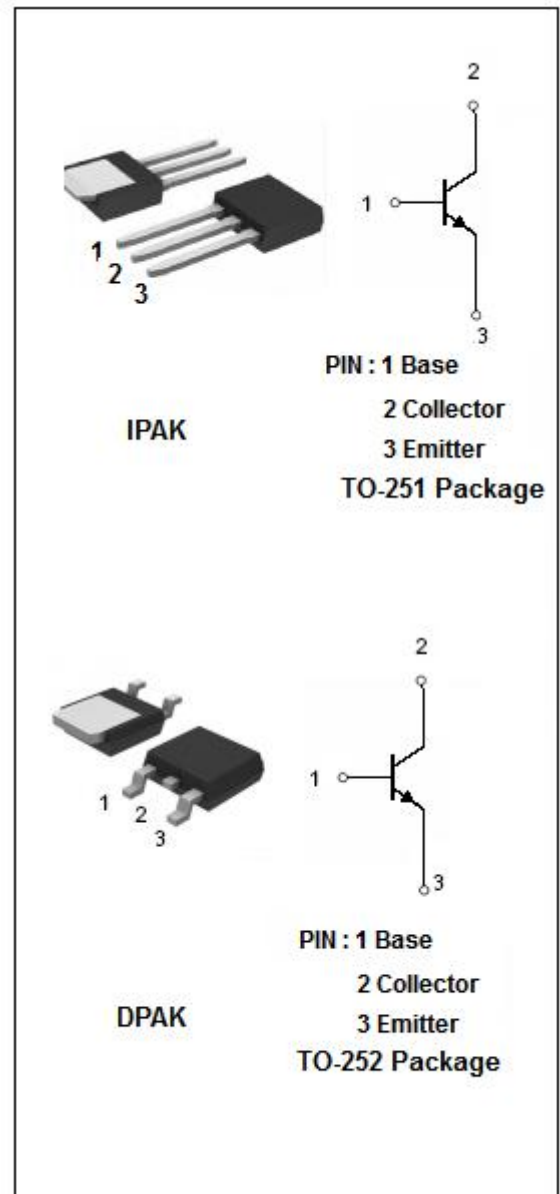
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 0.5V(Typ) @ I_C = 2A$
- Complement to Type 2SB1182
- Good Linearity of h_{FE}
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- DC/DC converter, relay drivers, lamp drivers, motor drivers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	32	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	2.5	A
P_C	Collector Power Dissipation	10	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD1758****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 = 2A; I _B = 200mA		0.5	0.8	V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 1mA; I _B = 0	32			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 50uA; I _C = 0	5			V
I _{CBO}	Collector Cutoff Current	V _{CB} = 20V; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			1.0	μ A
h _{FE}	DC Current Gain	I _C = 0.5A; V _{CE} =3V	82		390	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f= 1.0MHz		30		pF
f _T	Current-Gain—Bandwidth Product	I _C = 50mA; V _{CE} = 5V		100		MHz

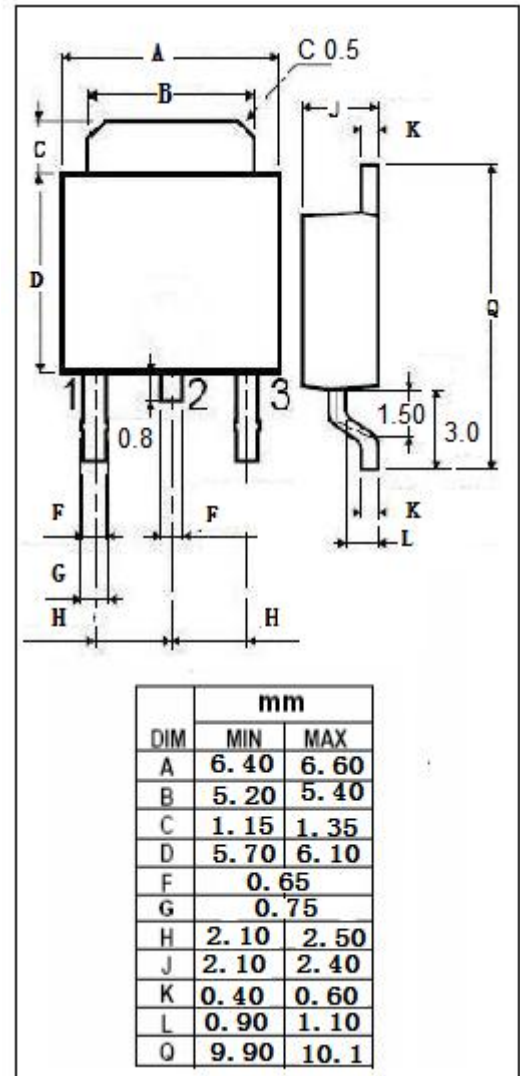
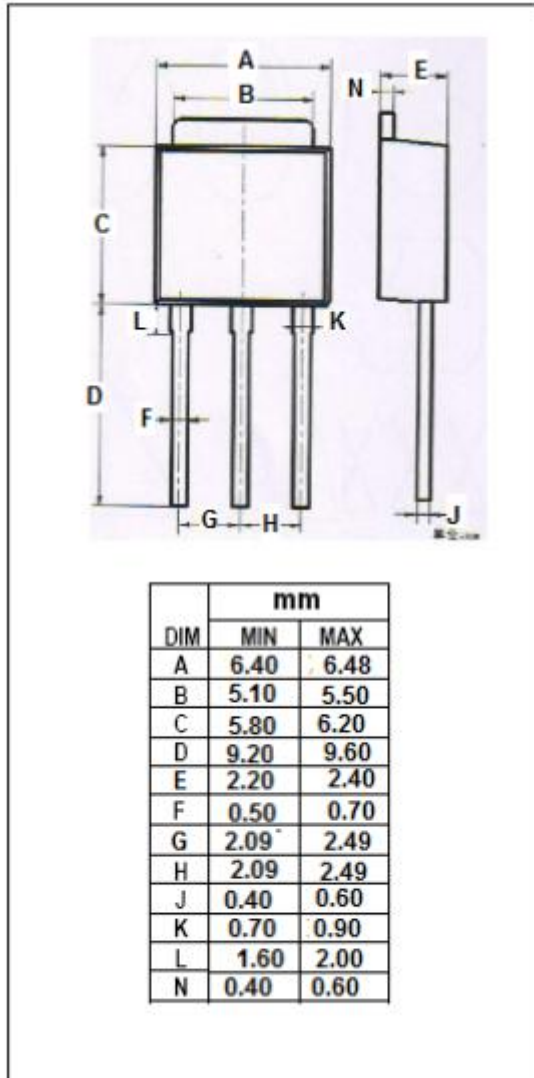
◆ h_{FE} Classifications

P	Q	R
82-180	120-270	180-390

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Outline Drawing



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