

isc Silicon PNP Power Transistor
2SA1952
DESCRIPTION

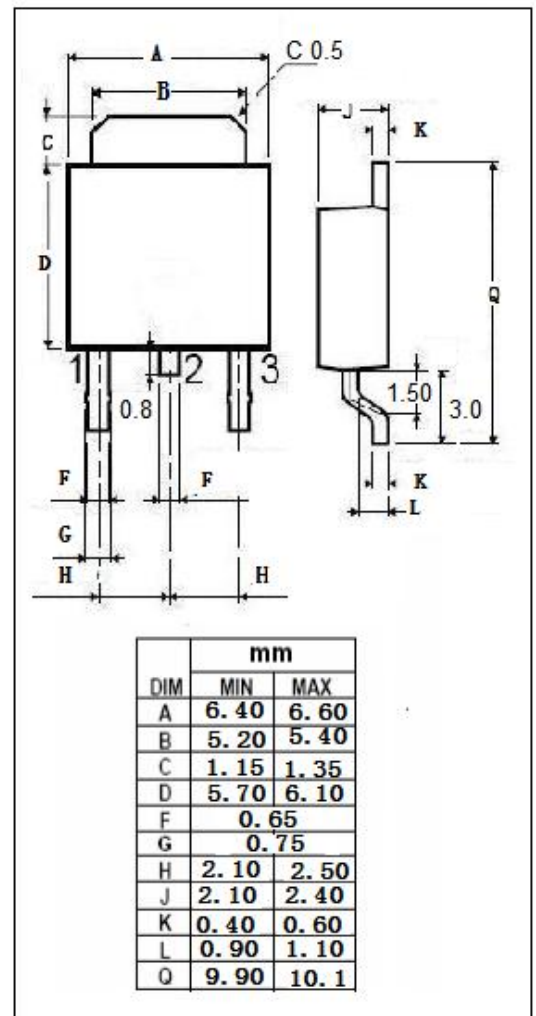
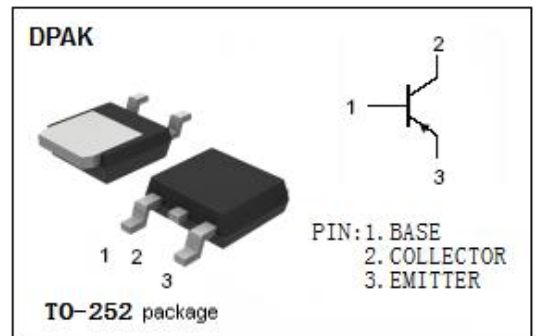
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.3(V)(Max) @ I_C = -3A$
- High Switching Speed
- Complement to Type 2SC5103
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high current switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
P_C	Total Power Dissipation @ $T_C = 25^\circ C$	10	W
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 _{(BR)CBO}	Collector-base breakdown voltage	I _C = -50μA; I _E = 0	-100			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA; I _B = 0	-60			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E = -50μA; I _C = 0	-5			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -0.15A			-0.3	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = -4A; I _B = -0.2A			-0.5	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C = -3A; I _B = -0.15A			-1.2	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C = -4A; I _B = -0.2A			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -2V	120		270	
f _T	Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -4V		80		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1MHz		130		pF

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