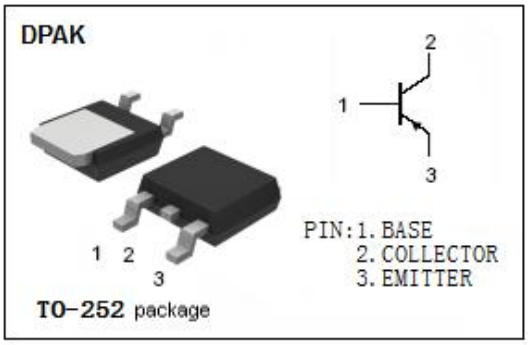
isc Silicon PNP Power Transistor 2SA1952

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

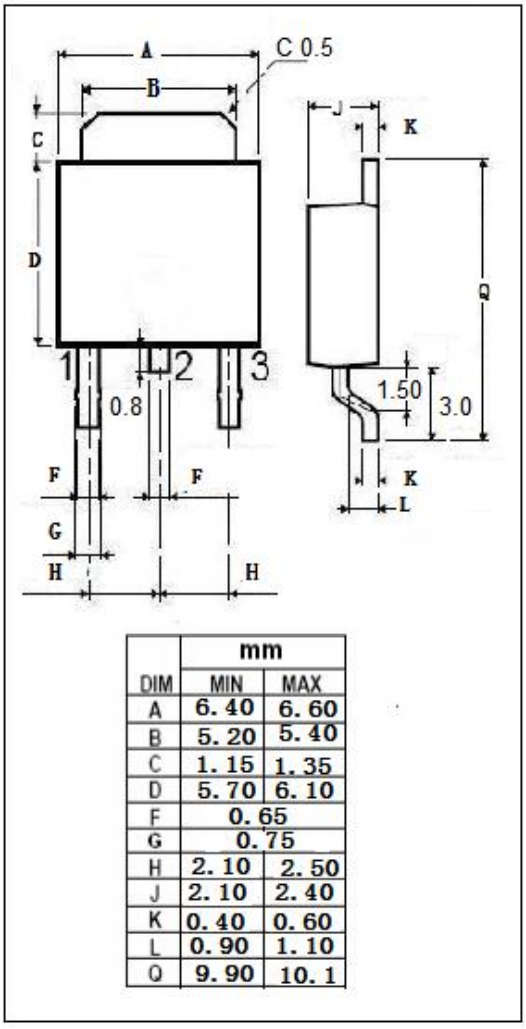


APPLICATIONS

- Designed for high current switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	10	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-10	μA
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