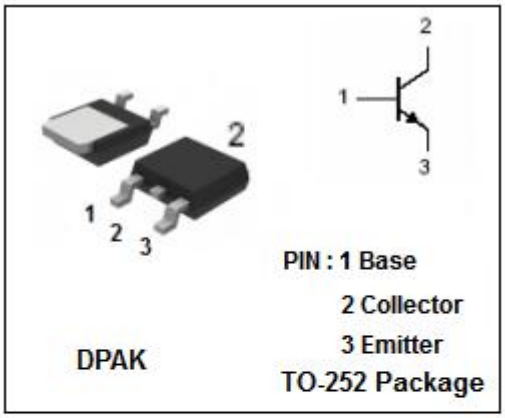
isc Silicon NPN Power Transistor 2SC3303



DESCRIPTION

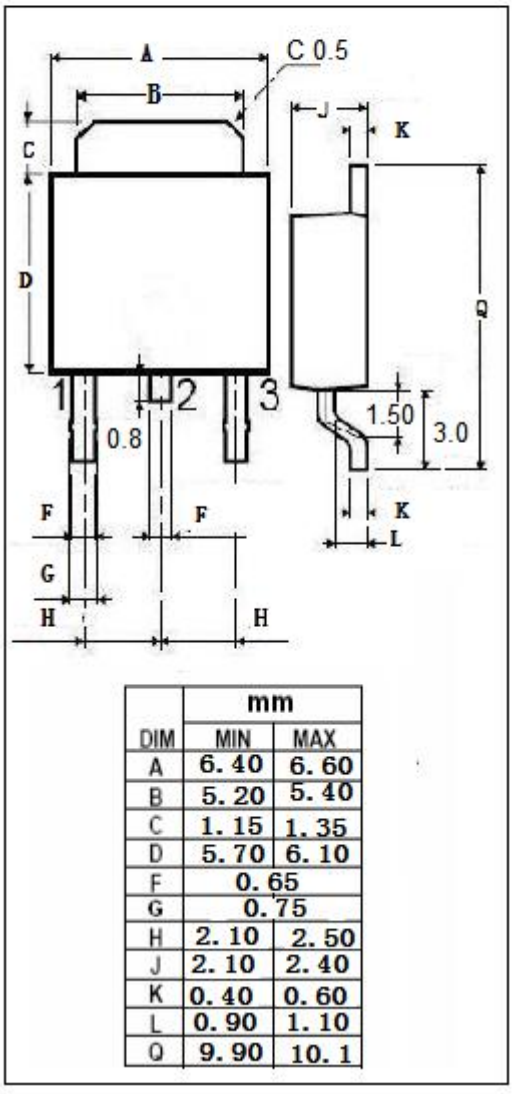
- High switching speed time
- Low collector-to-emitter saturation voltage
- Fast switching speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
P_C	Collector Power Dissipation	1.0	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
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3.0A; I_B= 150mA			0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3.0A; I_B= 150mA			1.2	V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 100uA; I_B= 0	100			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA; I_B= 0	80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 100uA; I_C= 0	7			V
I_{CBO}	Collector Cutoff Current	V_{CB}= 100V; I_E= 0			1	uA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			1	uA
h_{FE1}	DC Current Gain	I_C= 1A; V_{CE}= 1V	70		240	
h_{FE2}	DC Current Gain	I_C= 3A; V_{CE}= 1V	40			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1.0MHz		80		pF
f_T	Current-Gain—Bandwidth Product	I_C= 1A; V_{CE}= 4V		20		MHz

◆ **h_{FE1} Classifications**

O	Y
70-140	120-240

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