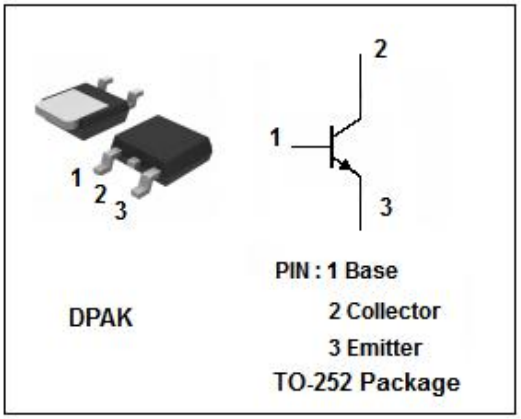
isc Silicon NPN Power Transistor — 2SC3518-Z

DESCRIPTION

- Low collector saturation voltage
- High DC current gain
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

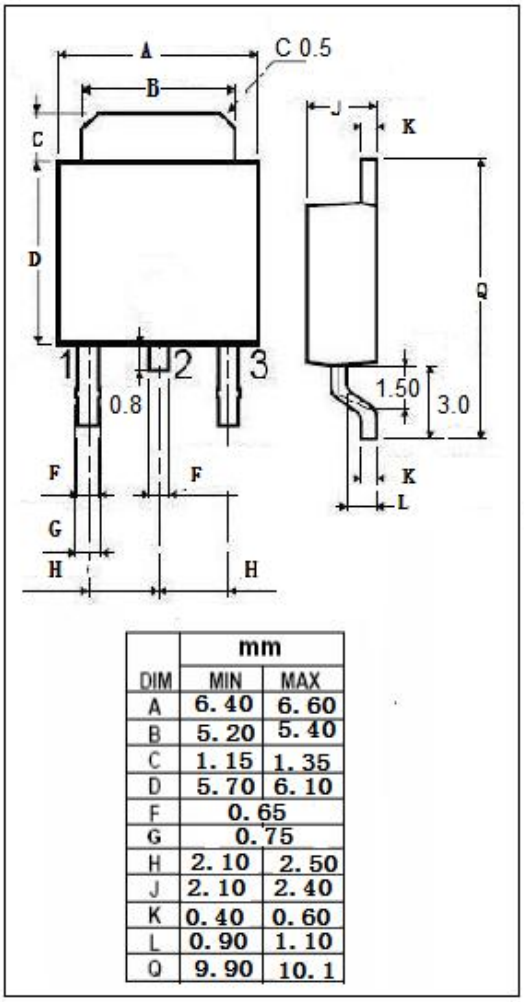
- This transistor is ideal for audio frequency amplifier and switching especially in hybrid integrated circuits

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak NOTE1	7	A
P_C	Collector Power Dissipation @T_a=25℃ NOTE2	2	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

NOTE1:PW≤300ms,Duty cycle ≤10%

NOTE2:Printing boarding mounted



DIM	mm MIN	mm 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
$V_{CE(sat)}$NOTE	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 200mA			0.3	V
$V_{BE(sat)}$NOTE	Base-Emitter Saturation Voltage	I_C= 2A; I_B= 200mA			1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 50V; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	μA
h_{FE-1}NOTE	DC Current Gain	I_C= 5A; V_{CE}= 1V	50			
h_{FE-2}NOTE	DC Current Gain	I_C= 2A; V_{CE}= 1V	100		400	
f_TNOTE	Current-Gain—Bandwidth Product	I_C= 500mA; V_{CE}= 10V		120		MHz

NOTE:Pulse test PW≤350us,duty cycle ≤2%/pulse

◆ **h_{FE-2} Classifications**

M	L	K
100-200	160-320	200-400