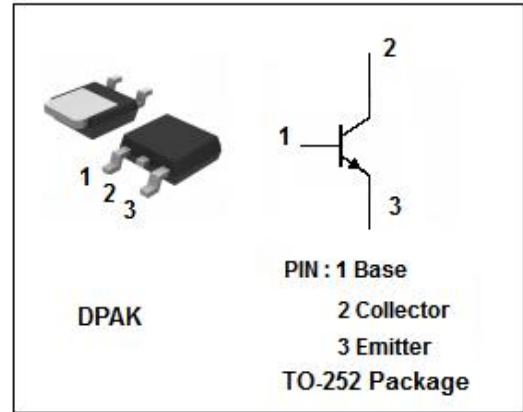


isc Silicon NPN Power Transistor
2SC3518-Z
DESCRIPTION

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

APPLICATIONS

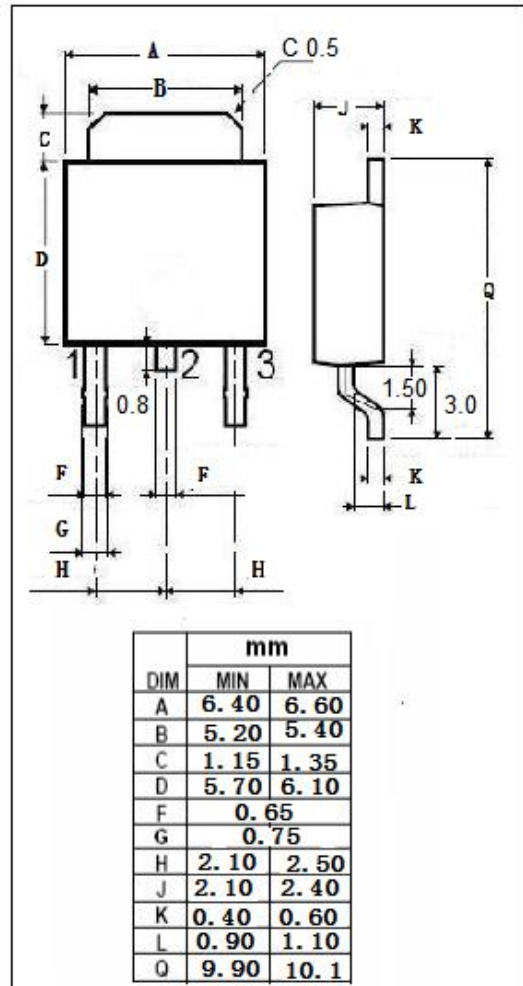
- This transistor is ideal for audio frequency amplifier and switching especially in hybrid integrated circuits


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

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 @ $T_a=25^\circ\text{C}$ ^{NOTE2}	2	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

 NOTE1: $PW \leq 300\text{ms}$, Duty cycle $\leq 10\%$

NOTE2: Printing boarding mounted



isc Silicon NPN Power Transistor

2SC3518-Z

ELECTRICAL CHARACTERISTICS

T_c=25°C 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	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
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 _T ^{NOTE}	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

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