

isc Silicon NPN Power Transistor

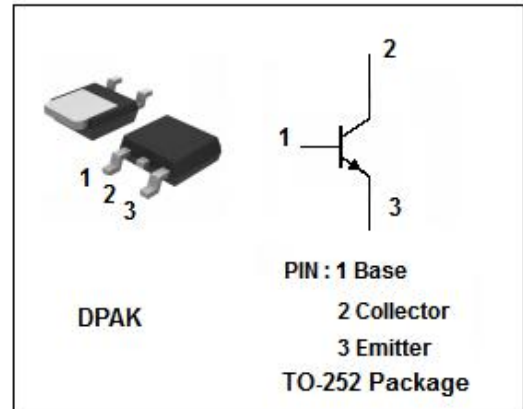
2SC3518-Z

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

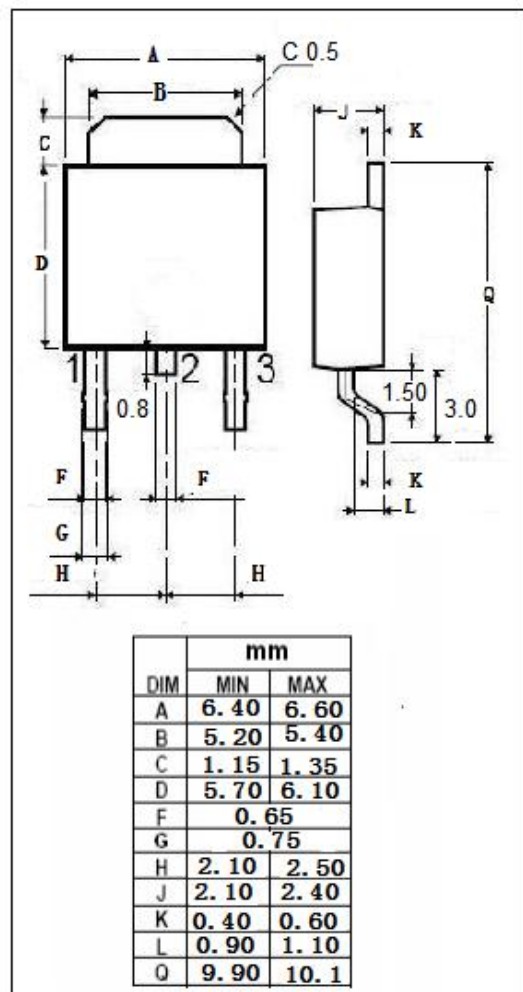


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

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°C ^{NOTE2}	2	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

NOTE1:PW≤300ms,Duty cycle ≤10%

NOTE2:Printing boarding mounted



isc Silicon NPN Power Transistor**2SC3518-Z****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}^{\text{NOTE}}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=200\text{mA}$			0.3	V
$V_{BE(sat)}^{\text{NOTE}}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=200\text{mA}$			1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=50\text{V}; I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	μA
h_{FE-1}^{NOTE}	DC Current Gain	$I_C=5\text{A}; V_{CE}=1\text{V}$	50			
h_{FE-2}^{NOTE}	DC Current Gain	$I_C=2\text{A}; V_{CE}=1\text{V}$	100		400	
f_T^{NOTE}	Current-Gain—Bandwidth Product	$I_C=500\text{mA}; V_{CE}=10\text{V}$		120		MHz

NOTE: Pulse test $PW \leq 350\mu\text{s}$, duty cycle $\leq 2\%$ /pulse**◆ h_{FE-2} Classifications**

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