

ISC Silicon NPN Power Transistor

2SD1518

DESCRIPTION

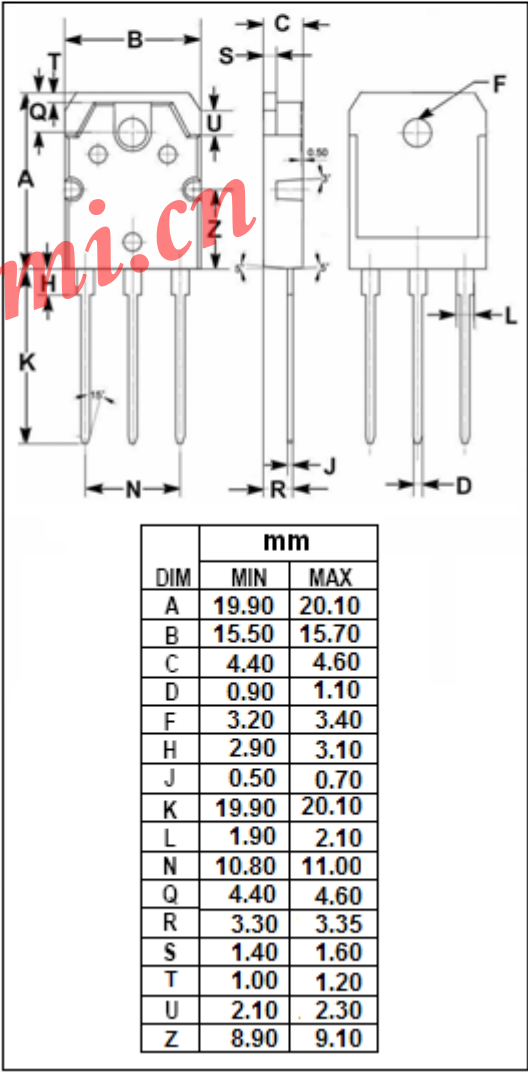
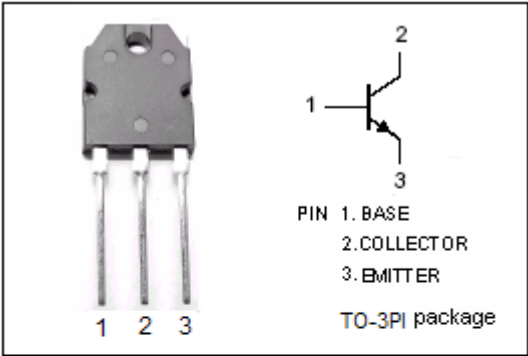
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 400V(\text{Min})$
- High Switching Speed

APPLICATIONS

- Switching regulator and high voltage switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base voltage	7	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Pulse	10	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	50	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



ISC Silicon NPN Power Transistor**2SD1518****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.5A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 900V; I _E = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 10mA ; V _{CE} = 5V	8			
h _{FE-2}	DC Current Gain	I _C = 0.6A; V _{CE} = 5V	10		40	
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 10V		5		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz		75		pF
t _f	Fall Time	I _C = 2.5A; I _{B1} = 0.5A; I _{B2} = -1A			0.5	μs