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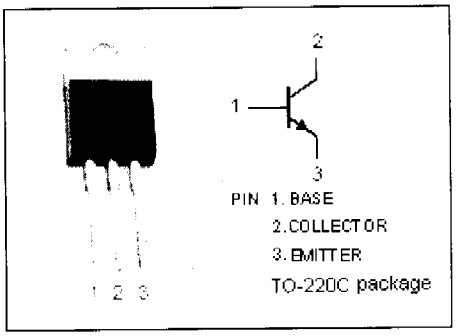
Silicon NPN Power Transistor

2SC2518



DESCRIPTION

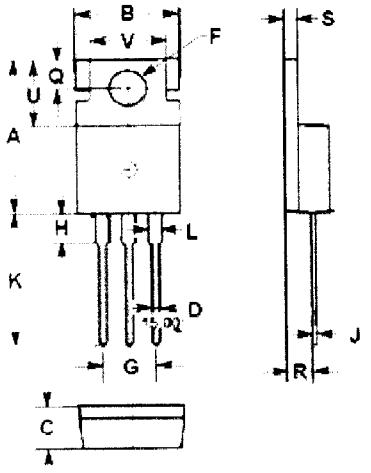
- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400V(Min)
- Low Collector Saturation Voltage
- High Speed Switching

APPLICATIONS

- Designed for switching regulator, DC-DC converter and ultrasonic applicance applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	2.5	A
P_C	Total Power Dissipation @ T_C=25℃	40	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	400		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.4A		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2A; I_B= 0.4A		1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 400V; I_E= 0		10	μ A
I_{CER}	Collector Cutoff Current	V_{CE}= 400V; R_{BE}= 51Ω , T_a=125℃		1.0	mA
I_{CEX}	Collector Cutoff Current	V_{CE}= 400V; $V_{BE(off)}$= -1.5V V_{CE}= 400V; $V_{BE(off)}$= -1.5V; T_a=125℃		10 1.0	μ A mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C=0		10	μ A
h_{FE-1}	DC Current Gain	I_C= 0.5A; V_{CE}= 5V	20	80	
h_{FE-2}	DC Current Gain	I_C= 2A; V_{CE}= 5V	10		

Switching times

t_{on}	Turn-on Time	I_C= 2A ,R_L= 75Ω , I_{B1}= -I_{B2}= 0.4A,V_{CC}≈ 150V		1.0	μ s
t_{stg}	Storage Time			2.5	μ s
t_f	Fall Time			0.7	μ s

◆ h_{FE-2} Classifications

M	L	K
20-40	30-60	40-80