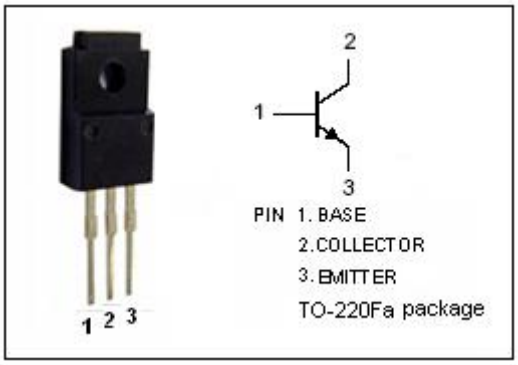
isc Silicon NPN Power Transistor 2SC4383

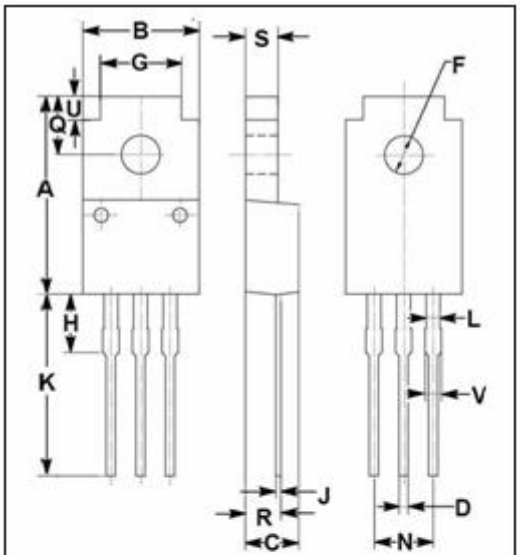


DESCRIPTION

- Mold package that does not require an insulating board or insulation bushing
- High Speed Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- This transistor is ideal for use in 50KHz class switching regulators.



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	180	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @T_a=25℃	2.5	W
	Collector Power Dissipation @T_C=25℃	40	
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

isc Silicon NPN Power Transistor 2SC4383

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 25mA; I_B= 0	180			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=3A; I_B= 300mA			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=3A; I_B= 300mA			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}=200V; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	μA
h_{FE}	DC Current Gain	I_C= 3A; V_{CE}= 4V	30			
Switching Times						
t_{on}	Turn-on Time	I_C=3A; I_{B1}= 0.3A; I_{B2}= -0.3A;			2	μs
t_s	Storage Time				1	μs
t_f	Fall Time				1	μs