

isc Silicon NPN Power Transistor
2SC4383
DESCRIPTION

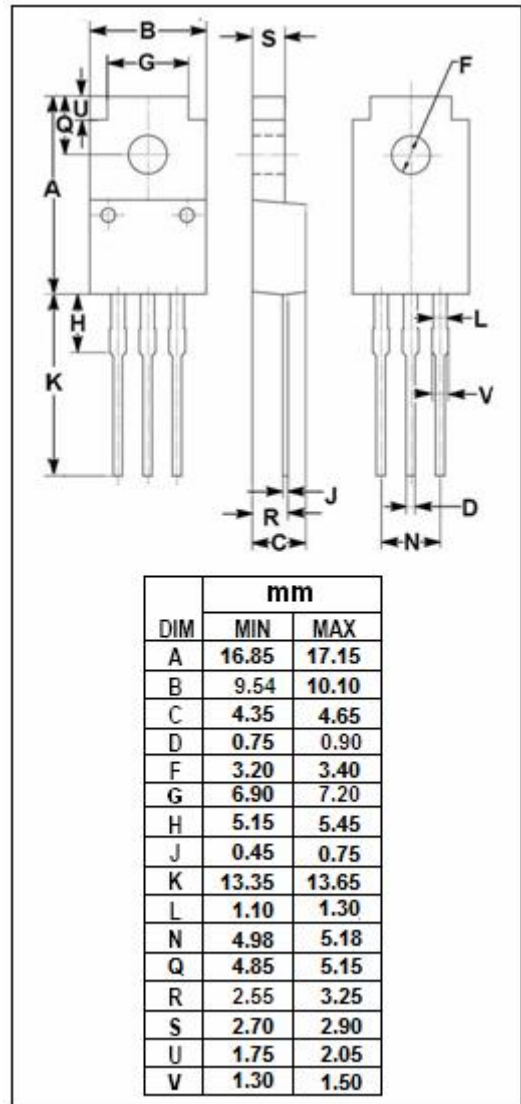
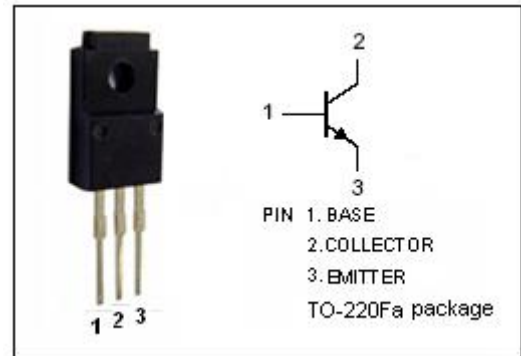
- Mold package that does not require an insulating board or insulation bushing
- High Speed Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

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

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 @ $T_a=25^\circ\text{C}$	2.5	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	40	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC4383****ELECTRICAL CHARACTERISTICS**T_c=25°C 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	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
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	μ s
t _s	Storage Time				1	μ s
t _f	Fall Time				1	μ s

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