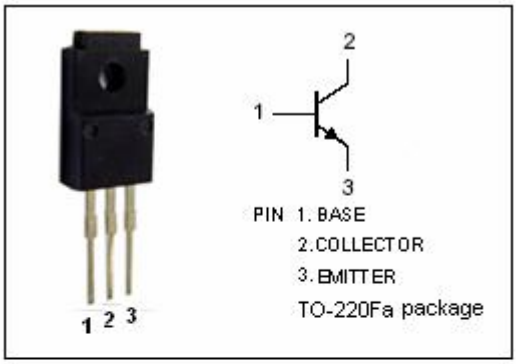
isc Silicon NPN Power Transistor 2SD1365

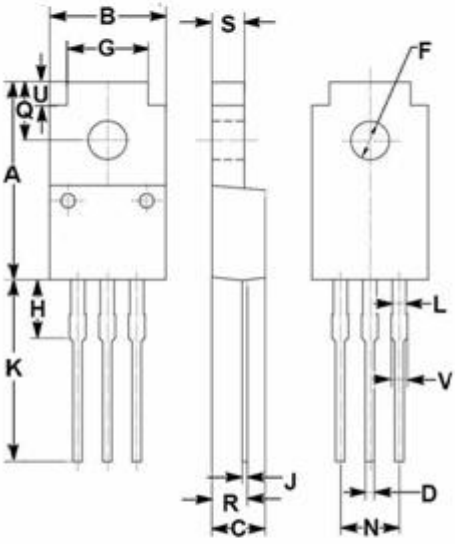


DESCRIPTION

- High Collector-Base Voltage
  : $V_{(BR)CBO}$= 800V(Min)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V(Max)@ I_C= 2A
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulators
- Motor control systems.
- Power amplifier.



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	3.80	4.20
J	0.45	0.75
K	13.35	13.80
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	800	V
V_{CEO}	Collector-Emitter Voltage	500	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	5	A
P_C	Collector Power Dissipation @T_a=25℃	1.5	W
	Collector Power Dissipation @T_C=25℃	40	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA; I_B= 0	500			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2.0A; I_B= 0.4A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2.0A; I_B= 0.4A			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V ; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	μA
h_{FE-1}	DC Current Gain	I_C= 5mA; V_{CE}= 5V	10			
h_{FE-2}	DC Current Gain	I_C= 0.5A; V_{CE}= 5V	20		40	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V		7		MHz
Switching Times						
t_{on}	Turn-on Time	I_C= 2.0A; I_{B1}= -I_{B2}= 0.4A; V_{CC}= 250V			1.0	μs
t_s	Storage Time				4.0	μs
t_f	Fall Time				1.0	μs

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