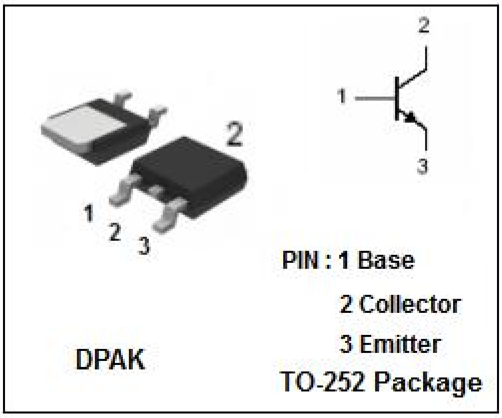
isc Silicon NPN Power Transistor KSH50TF

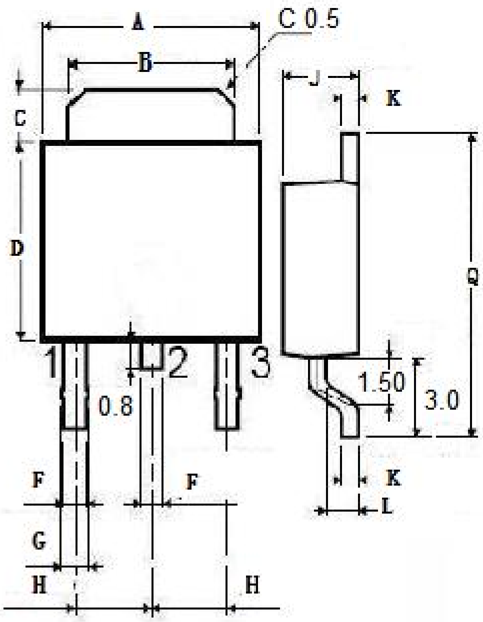
DESCRIPTION
- High switching speed time
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS
- High switching 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	5	V
I_C	Collector Current-Continuous	1	A
I_{CM}	Collector Current-peak	2	A
I_B	Base Current	0.6	A
P_C	Collector Power Dissipation T_a=25℃	1.5	W
	Collector Power Dissipation T_C=25℃	15	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	mm MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified,Pulse test: pw≤300us, duty cycle≤2%.

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(sus)}$	Collector-Emitter Sustaining Voltage	I_C= 30mA; I_B= 0	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 0.2A			1	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 1A;V_{CE}= 10V			1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 300V; IB= 0			0.2	mA
I_{CBO}	Base Cutoff Current	V_{CB}= 500V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			1	mA
h_{FE1}	DC Current Gain	I_C= 0.3A; V_{CE}= 10V	30		150	
h_{FE2}	DC Current Gain	I_C= 1A; V_{CE}= 10V	10			
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}=10V	10			MHz