

GENERAL PURPOSE AMPLIFIER
LOW SPEED SWITCHING APPLICATIONS
D-PACK FOR SURFACE MOUNT
APPLICATIONS

Lead Formed for Surface Mount Application(No Suffix)

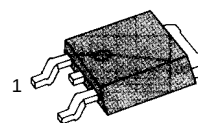
Straight Lead (I.LACK, "- I " Suffix)

Electrically Similar to Popular TIP29 and TIP29C

ABSOLUTE MAXIMUM RATINGS

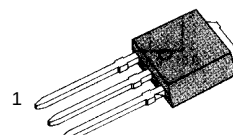
Characteristic	Symbol	Rating	Unit
Collector Base Voltage : KSH29	V_{CBO}	40	V
: KSH29C		100	V
Collector Emitter Voltage : KSH29	V_{CEO}	40	V
: KSH29C		100	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	1	A
Collector Current (Pulse)	I_C	3	A
Base Current	I_B	0.4	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	15	W
Collector Dissipation ($T_A=25^\circ\text{C}$)	P_C	1.56	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ 150	$^\circ\text{C}$

D-PAK



1. Base 2. Collector 3. Emitter

I-PAK



1. Base 2. Collector 3. Emitter

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector Emitter Sustaining Voltage : KSH29	$V_{CEO} \text{ (sus)}$	$I_C = -30\text{mA}, I_B = 0$	40		V
: KSH29C			100		V
Collector Cutoff Current : KSH29	I_{CEO}	$V_{CE} = 40\text{V}, I_B = 0$		50	μA
: KSH29C		$V_{CE} = 60\text{V}, I_B = 0$		50	μA
Collector Cutoff Current : KSH29	I_{CES}	$V_{CE} = 40\text{V}, V_{BE} = 0$		20	μA
: KSH29C		$V_{CE} = 100\text{V}, V_{BE} = 0$		20	μA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = 5\text{V}, I_C = 0$		1	mA
* DC Current Gain	h_{FE}	$V_{CE} = 4\text{V}, I_C = 0.2\text{A}$	40		
		$V_{CE} = 4\text{V}, I_C = 1\text{A}$	15	75	
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}, I_B = 125\text{mA}$		0.7	V
* Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 4\text{A}, I_C = 1\text{A}$		1.3	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10\text{V}, I_C = 200\text{mA}$	3		MHz
		$f = 1\text{MHz}$			