

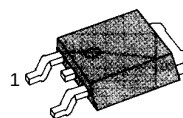
**GENERAL PURPOSE POWER AND SWITCHING
SUCH AS OUTPUT OR DRIVER STAGES IN
APPLICATIONS D-PACK FOR SURFACE
MOUNT APPLICATIONS**

- Load Formed for Surface Mount Application(No Suffix)
- Straight Lead (I.PACK,"-I" Suffix)
- Electrically Similar to Popular KSE45H
- Fast Switching Speeds
- Low Collector Emitter Saturation Voltage

ABSOLUTE MAXIMUM RATINGS

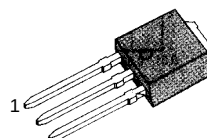
Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage	V_{CEO}	- 80	V
Emitter Base Voltage	V_{EBO}	- 5	V
Collector Current (DC)	I_C	- 8	A
Collector Current (Pulse)	I_C	- 16	A
Collector Dissipation ($T_C=25^{\circ}\text{C}$)	P_C	20	W
Collector Dissipation ($T_A=25^{\circ}\text{C}$)	P_C	1.75	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ 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	Typ	Max	Unit
Collector Emitter Sustaining Voltage	$V_{CEO} \text{ (SUS)}$	$I_C = - 30\text{mA}, I_B = 0$	- 80			V
Collector Cutoff Current	I_{CEO}	$V_{CE} = - 80\text{V}, I_B = 0$			- 10	μA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = - 5\text{V}, I_C = 0$			- 50	μA
DC Current Gain	h_{FE}	$V_{CE} = - 1\text{V}, I_C = - 2\text{A}$	60			
		$V_{CE} = - 1\text{V}, I_C = - 4\text{A}$	40			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = - 8\text{A}, I_B = - 0.4\text{A}$			- 1	V
Base Emitter Saturation Voltage	$V_{BE(on)}$	$I_C = - 8\text{A}, I_B = - 0.8\text{A}$			- 1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = - 10\text{A}, I_C = - 0.5\text{A}$ $f = 20\text{MHz}$		40		MHz
Collector Capacitance	C_{OB}	$V_{CB} = - 10\text{V}, f = 1\text{MHz}$		230		pF
Turn On Time	t_{ON}	$I_C = - 5\text{A}, I_{B1} = - 0.5\text{A}$		135		ns
Storage Time	t_{STG}	$I_{B1} = - I_{B2} = - 0.5\text{A}$		500		ns
Fall Time	t_F			100		ns

* Pulse Test : $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

