

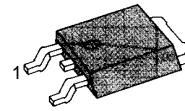
**GENERAL PURPOSE POWER AND SWITCHING  
SUCH AS OUTPUT OR DRIVER STAGES IN  
APPLICATIONS D-PACK FOR SURFACE  
MOUNT APPLICATIONS**

- Load Formed for Surface Mount Application(No Suffix)
- Straight Lead (I.PACK, "-I" Suffix)
- Electrically Similar to Popular KSE44H
- Fast Switching Speeds
- Low Collector Emitter Saturation Voltage

**ABSOLUTE MAXIMUM RATINGS**

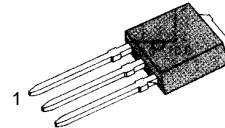
Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage	$V_{CEO}$	80	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current (DC)	$I_C$	8	A
Collector Current (Pulse)	$I_C$	16	A
Collector Dissipation ( $T_C=25^\circ\text{C}$ )	$P_C$	20	W
Collector Dissipation ( $T_A=25^\circ\text{C}$ )	$P_C$	1.75	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-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	Typ	Max	Unit
* Collector Emitter Sustaining Voltage	$V_{CEO}$ (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	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{BE} = 5\text{V}, I_C = 0$			50	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 1\text{V}, I_C = 2\text{A}$ $V_{CE} = 1\text{V}, I_C = 4\text{A}$	60 40			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 8\text{A}, I_B = 0.4\text{A}$			1	V
Base Emitter On Voltage	$V_{BE(on)}$	$I_C = 8\text{A}, I_B = 0.8\text{A}$			1.5	V
Current Gain Bandwidth Product	$f_T$	$V_{CE} = 10\text{A}, I_C = 0.5\text{A}$ $f = 20\text{MHz}$		50		MHz
Collector Capacitance	$C_{OB}$	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		130		pF
Turn On Time	$t_{ON}$	$I_C = 5\text{A}, I_B = 0.5\text{A}$		300		ns
Storage Time	$t_{STG}$	$I_{B1} = I_{B2} = 0.5\text{A}$		500		ns
Fall Time	$t_F$			140		ns

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

