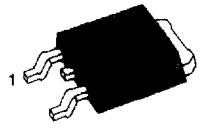
GENERAL PURPOSE POWER AND SWITCHING SUCH AS OUTPUT OR DRIVER STAGES IN APPLICATIONS D-PACK FOR SURFACE MOUNT APPLICATIONS

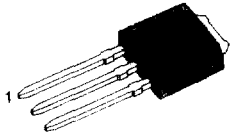
- Load Formed for Surface Mount Application(No Suffix)
- Straight Lead (I.PACK,"- I " Suffix)
- Electrically Similar to Popular KSE45H
- Fast Switching Speeds
- Low Collector Emitter Saturation Voltage

D-PAK



1. Base 2. Collector 3. Emitter

I-PAK



1. Base 2. Collector 3. Emitter

ABSOLUTE MAXIMUM RATINGS

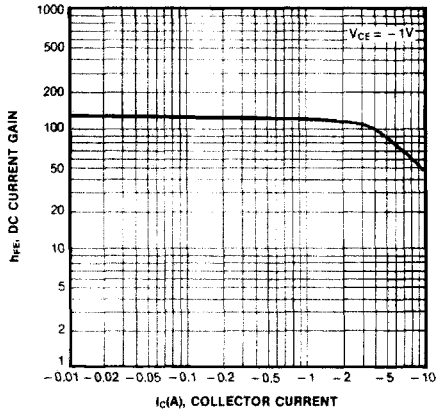
Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage	V_{CEO}	- 80	V
Emitter Base Voltage	V_{EBO}	- 5	V
Collector Current (DC)	I_C	- 8	A
Collector Current (Pulse)	I_C	- 16	A
Collector Dissipation (T_C=25℃)	P_C	20	W
Collector Dissipation (T_A=25℃)	P_C	1.75	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ 150	℃

ELECTRICAL CHARACTERISTICS (Tc =25℃)

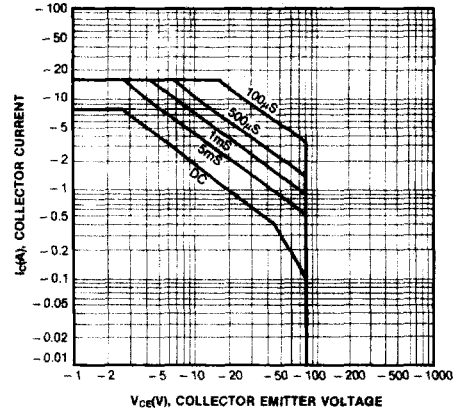
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Emitter Sustaining Voltage	V_{CEO} (sus)	I_C = - 30mA, I_B = 0	- 80			V
Collector Cutoff Current	I_{CEO}	V_{CE} = - 80V, I_B = 0			- 10	uA
Emitter Cutoff Current	I_{EBO}	V_{BE} = - 5V, I_C = 0			- 50	uA
DC Current Gain	h_{FE}	V_{CE} = - 1V, I_C = - 2A	60			
		V_{CE} = - 1V, I_C = - 4A	40			
Collector Emitter Saturation Voltage	V_{CE}(sat)	I_C = - 8A, I_B = - 0.4A			- 1	V
Base Emitter Saturation Voltage	V_{BE}(on)	I_C = - 8A, I_B = - 0.8A			- 1.5	V
Current Gain Bandwidth Product	f_T	V_{CE}= - 10A, I_C = - 0.5A f = 20MHz		40		MHz
Collector Capacitance	C_{OB}	V_{CB} = - 10V, f = 1MHz		230		pF
Turn On Time	t_{ON}	I_C = - 5A, I_B1 = - 0.5A		135		ns
Storage Time	t_{STG}	I_B1= - I_B2 = - 0.5A		500		ns
Fall Time	t_F			100		ns

* Pulse Test : PW≤300uS, Duty Cycle≤2%

DC CURRENT GAIN



SAFE OPERATING AREA



POWER DERATING