

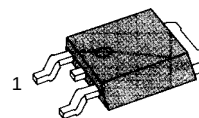
**GENERAL PURPOSE AMPLIFIER
LOW SPEED SWITCHING APPLICATIONS
D-PACK FOR SURFACE MOUNT
APPLICATIONS**

- Load Formed for Surface Mount Application(No Suffix)
- Straight Lead (I.PACK, "-I" Suffix)
- Electrically Similar to Popular TIP41 and TIP41C

ABSOLUTE MAXIMUM RATINGS

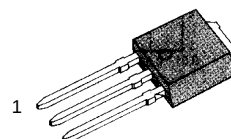
Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	100	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	6	A
Collector Current (Pulse)	I_C	10	A
Base Current	I_B	2	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	20	W
Collector Dissipation ($T_A=25^\circ\text{C}$)	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	Max	Unit
* Collector Emitter Sustaining Voltage	$V_{CEO} \text{ (sus)}$	$I_C = 30\text{mA}, I_B = 0$	100		V
Collector Cutoff Current	I_{CEO}	$V_{CE} = 60\text{V}, I_B = 0$		50	μA
Collector Cutoff Current	I_{CES}	$V_{CE} = 100\text{V}, V_{BE} = 0$		10	μA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = 5\text{V}, I_C = 0$		0.5	mA
* DC Current Gain	h_{FE}	$V_{CE} = 4\text{V}, I_C = 0.3\text{A}$	30		
		$V_{CE} = 4\text{V}, I_C = 3\text{A}$	15	75	
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6\text{A}, I_B = 600\text{mA}$		1.5	V
* Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 6\text{A}, I_C = 4\text{A}$		2	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10\text{V}, I_C = 500\text{mA}$	3		MHz
		$f = 1\text{MHz}$			

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

