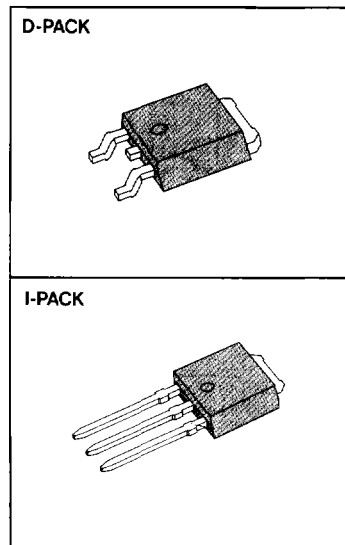


**GENERAL PURPOSE AMPLIFIER.  
LOW SPEED SWITCHING APPLICATIONS.  
D-PACK FOR SURFACE MOUNT  
APPLICATIONS**

- Lead Formed for Surface Mount Applications (No Suffix)
- Straight Lead (I-PACK, “-1” Suffix)
- Electrically Similar to Popular MJE3055
- DC Current Gain Specified to 10A
- High Current Gain-Bandwidth Product:  
 $f_T = 2\text{MHz (MIN)}$ ,  $I_C = 500\text{mA}$



**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	$V_{CBO}$	70	V
Collector Emitter Voltage	$V_{CEO}$	60	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	10	A
Base Current	$I_B$	6	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	$^\circ\text{C}$

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
*Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 30\text{mA}$ , $I_B = 0$	60		V
Collector Cutoff Current	$I_{CEO}$	$V_{CE} = 30\text{V}$ , $I_B = 0$		50	$\mu\text{A}$
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 70\text{V}$ , $I_E = 0$		2	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}$ , $I_C = 0$		0.5	mA
*DC Current Gain	$h_{FE}$	$V_{CE} = 4\text{V}$ , $I_C = 4\text{A}$	20	100	
		$V_{CE} = 4\text{V}$ , $I_C = 10\text{A}$	5		
*Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}$ , $I_B = 0.4\text{A}$		1.1	V
		$I_C = 10\text{A}$ , $I_B = 3.3\text{A}$		8	V
*Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 4\text{A}$ , $I_C = 4\text{A}$		1.8	V
Current Gain Bandwidth Product	$f_T$	$V_{CE} = 10\text{V}$ , $I_C = 500\text{mA}$ $f = 500\text{KHz}$	2		MHz

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

