

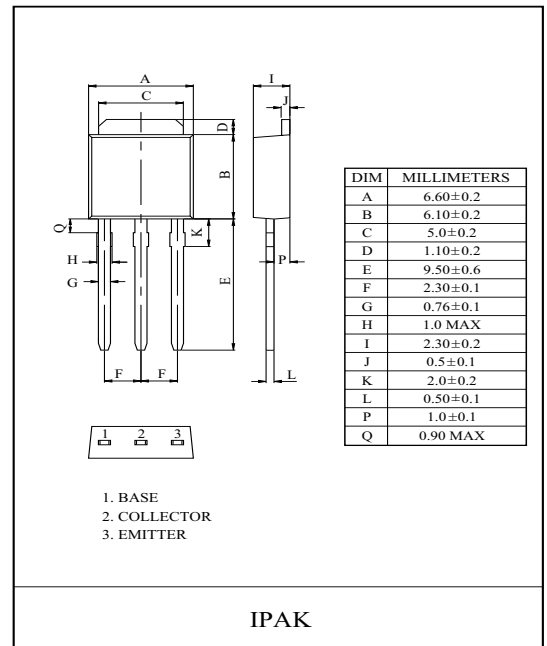
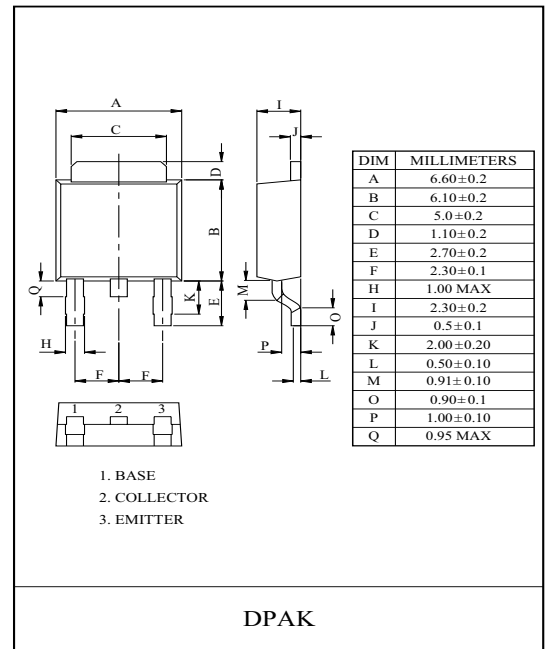
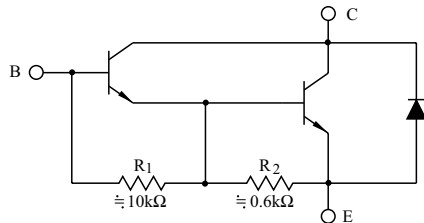
MONOLITHIC CONSTRUCTION WITH BUILT IN  
BASE-EMITTER SHUNT RESISTORS INDUSTRIAL USE.

#### FEATURES

- High DC Current Gain.  
:  $h_{FE}=1000(\text{Min.}), @V_{CE}=4V, I_C=1A.$
- Low Collector-Emitter Saturation Voltage.
- Straight Lead (IPAK, "L" Suffix)
- Complementary to MJD117/L.

#### MAXIMUM RATING ( $T_a=25^\circ\text{C}$ )

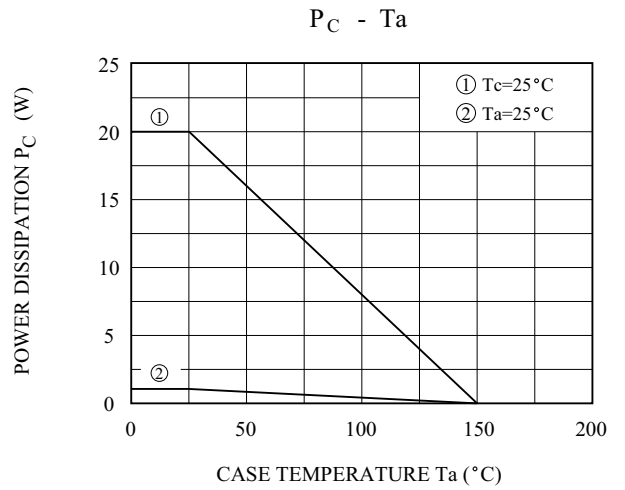
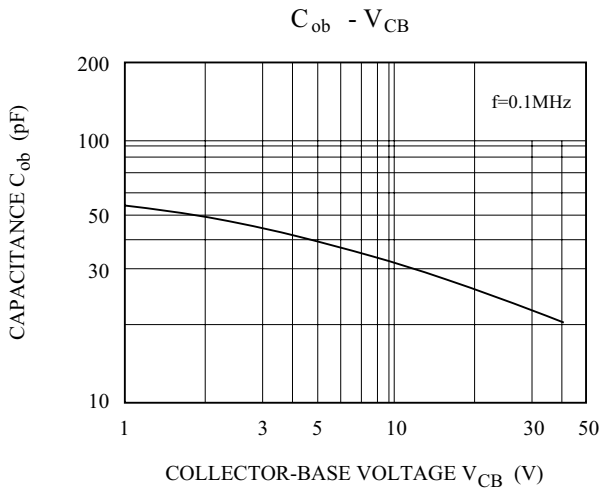
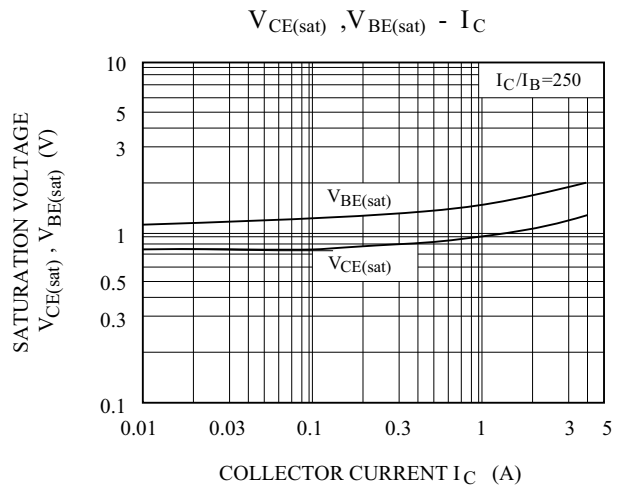
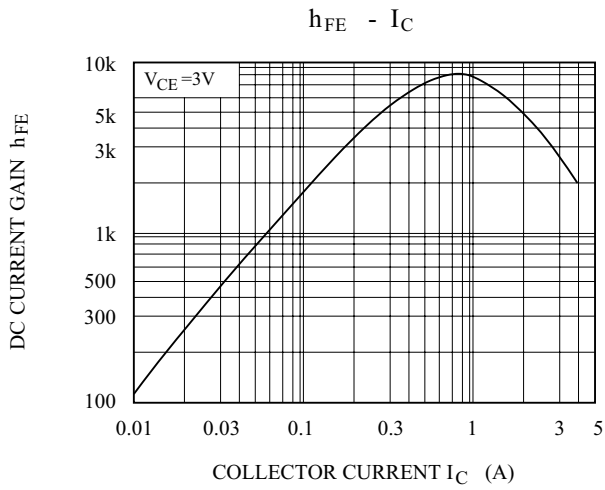
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	100	V
Collector-Emitter Voltage		$V_{CEO}$	100	V
Emitter-Base Voltage		$V_{EBO}$	5	V
Collector Current	DC	$I_C$	2	A
	Pulse		4	
Base Current	DC	$I_B$	50	mA
Collector Power Dissipation	$T_a=25^\circ\text{C}$	$P_C$	1.0	W
	$T_c=25^\circ\text{C}$		20	
Junction Temperature		$T_j$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=30\text{mA}, I_B=0$	100	-	-	V
Collector Cut-off Current	$I_{CEO}$	$V_{CE}=50V, I_B=0$	-	-	20	$\mu\text{A}$
	$I_{CBO}$	$V_{CB}=100V, I_E=0$	-	-	20	
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	2	mA
DC Current Gain	$h_{FE}$	$V_{CE}=3V, I_C=0.5A$	500	-	-	
		$V_{CE}=3V, I_C=2A$	1,000	12,000	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2A, I_B=8\text{mA}$	-	-	2.0	V
Base-Emitter On Voltage	$V_{BE(ON)}$	$V_{CE}=3V, I_C=2A$	-	-	2.8	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=0.75A, f=1\text{MHz}$	25	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=0.1\text{MHz}$	-	-	100	pF

# MJD112/L



## SAFE OPERATING AREA

