

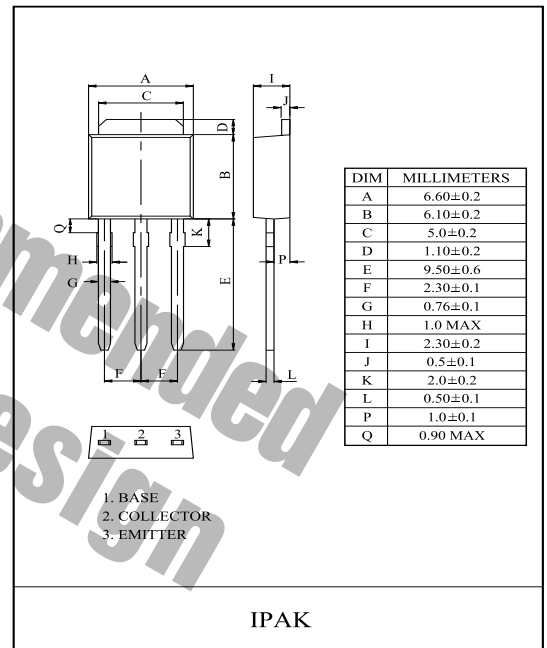
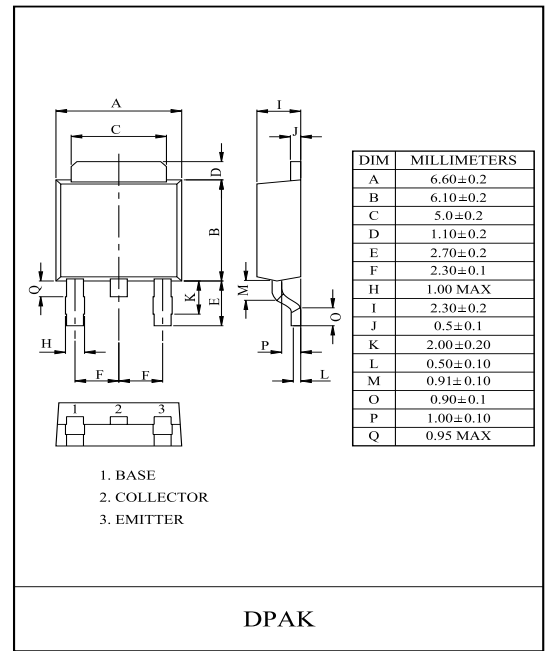
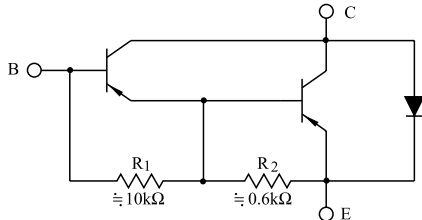
MONOLITHIC CONSTRUCTION WITH BUILT IN  
BASE-EMITTER SHUNT RESISTORS INDUSTRIAL USE.

#### 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 MJD112/L.

#### MAXIMUM RATING (Ta=25 )

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	Ta=25	$P_C$	1.0	W
	Tc=25		20	
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

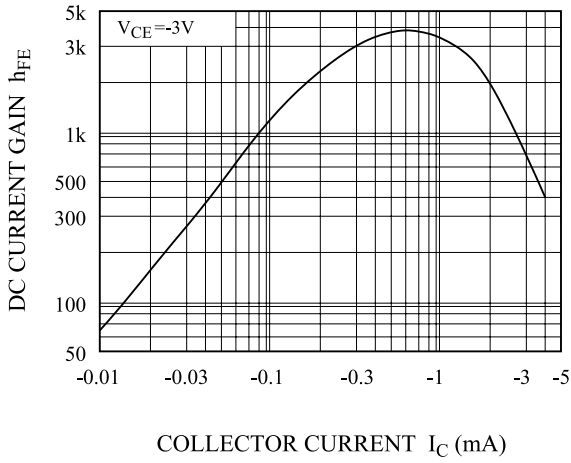


#### ELECTRICAL CHARACTERISTICS (Ta=25 )

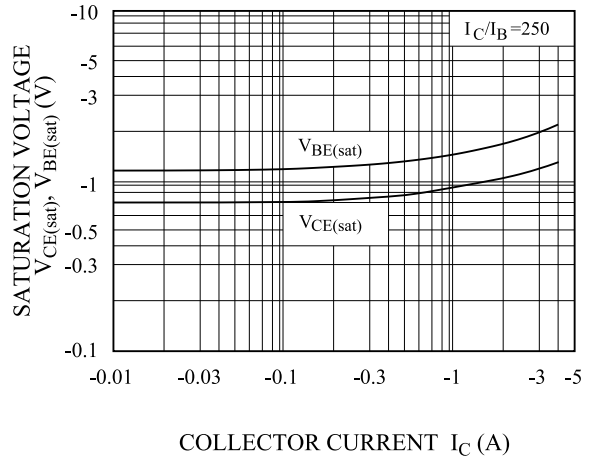
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=-30mA, I_B=0$	-100	-	-	V
Collector Cut-off Current	$I_{CEO}$	$V_{CE}=-50V, I_B=0$	-	-	-20	$\mu A$
	$I_{CBO}$	$V_{CB}=-100V, I_E=0$	-	-	-20	
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-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	$V_{CE(sat)}$	$I_C=-2A, I_B=-8mA$	-	-	-2.0	V
Base-Emitter On Voltage	$V_{BE(ON)}$	$V_{CE}=-3V, I_C=-2A$	-	-	-2.8	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=-10V, I_C=0.75A, f=1MHz$	25	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=0.1MHz$	-	-	200	pF

# MJD117/L

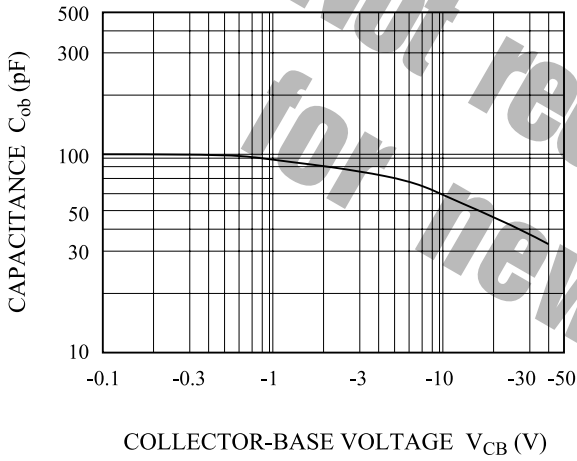
$h_{FE} - I_C$



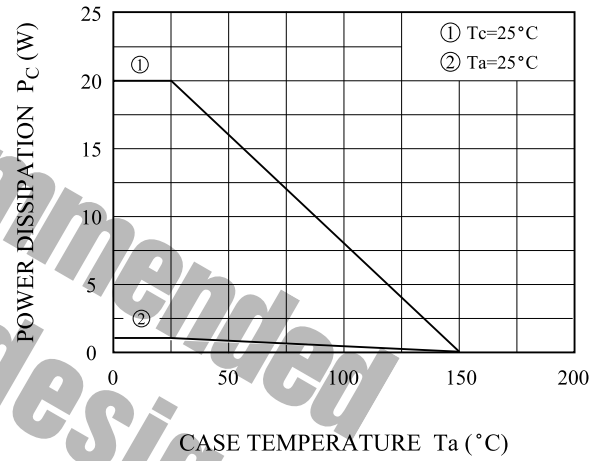
$V_{CE(sat)}, V_{BE(sat)} - I_C$



$C_{ob} - V_{CB}$



$P_C - T_a$



SAFE OPERATING AREA

