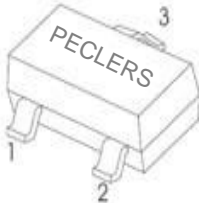
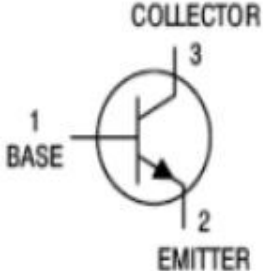


TRANSISTOR (PNP)	SOT-23 Plastic-Encapsulate Transistors		
<p style="text-align: center;"><u>SOT-23</u></p>   <p>1.BASE 2.EMITTER 3.COLLECTOR</p> <p style="text-align: center;">Marking :2F</p>	<p style="text-align: center;">Features</p> <ul style="list-style-type: none"> ※ Complementary NPN Type available MMBT2222A ※ Collector Current: $I_c=0.6A$ ※ Epitaxial Planar die construction 		
<p>MAXIMUM RATINGS (Ta=25°C unless otherwise noted)</p>			
Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	-60	V
Collector-Emitter Voltage	VCEO	-60	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	IC	-600	mA
Collector Power Dissipation	PC	300	mW
Thermal Resistance From Junction To Ambient	R θ JA	417	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 10 μA, IE=0	-60			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 10mA, IB=0	-60			V
Emitter-base breakdown voltage	V(BR)EBO	IE=10 μA, IC=0	-5			V
Collector cut-off current	ICBO	VCB=-50 V, IE=0			-20	nA
Collector cut-off current	ICEX	VCE=-30V, VBE(Off)=-0.5V			-10	nA
Base cut-off current	IEBO	VEB= -3V, IC=0			-50	nA
DC current gain	hFE	VCE=-10V, IC= -150mA	100		300	
	hFE	VCE=-10V, IC= -0.1mA	75			
Collector-emitter saturation voltage	VCE(sat)	IC=-150 mA, IB= -15mA			-0.4	V
Base-emitter saturation voltage	VBE(sat)	IC=-150 mA, IB= -15mA			-1.3	V
Transition frequency	fT	VCE=-20V, IC= -50mA f=100MHz	200			MHz
Delay time	td	VCE=-30V, Ic=-150mA, IB1=-15mA,			10	ns
Rise time	tr				25	ns
Storage time	ts	VCE=-6V, Ic=-150mA, IB1=-15mA,			225	ns
Fall time	tf				60	ns

CLASSIFICATION OF hFI

Rank	L	H	J
Range	120-200	200-350	300-400

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

