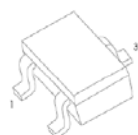


TRANSISTOR(NPN)		SOT-523 Plastic-Encapsulate Transistors				
SOT-523  1. BASE 2. EMITTER 3. COLLECTOR		Features - Low Cob:Cob=2.0pF(Typ) - Complement to 2SA1774				
MAXIMUM RATINGS (T _a =25°C unless otherwise noted)						
Symbol	Parameter	Value	Unit			
V _{CBO}	Collector-Base Voltage	60	V			
V _{CEO}	Collector-Emitter Voltage	50	V			
V _{EBO}	Emitter-Base Voltage	7	V			
I _C	Collector Current -Continuous	150	mA			
P _C	Collector Power Dissipation	150	mW			
T _J	Junction Temperature	150	°C			
T _{stg}	Storage Temperature	-55-150	°C			
ELECTRICAL CHARACTERISTICS (T _a =25°C unless otherwise specified)						
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =50uA, I _E =0	60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =50uA, I _C =0	7			V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =7V, I _C =0			0.1	μA
DC current gain	h _{FE}	V _{CE} =6V, I _C =1mA	120		560	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =50mA, I _B =5mA			0.4	V
Transition frequency	f _T	V _{CE} =12V, I _C =2mA, f=100MHz		180		MHz
Collector output capacitance	C _{ob}	V _{CB} =12V, I _E =0, f=1MHz			3.5	pF
CLASSIFICATION OF h _{FE}						
Rank	Q	R	S			
Range	120-270	180-390	270-560			
Marking	BQ	BR	BS			

Typical Characteristics

