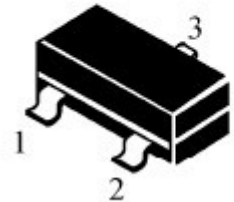


NPN EPTTAXIAL SILICON TRANSISTOR

SURFACE MOUNT SMALL
SIGNAL TRANSISTORS

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{CBO}	50	V
Collector Current	I _C	1000	mA
Peak Collector Current	I _{CM}	1000	mA
Peak Emitter Current	I _{EM}	800	mA
Power Dissipation T _{sb} =50°C(Note1)	P _D	310	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-65~150	°C

ELECTRICAL CHARACTERISTICS

(Ta=25°C)

Characteristic	Symbol	MIN.	TYP.	MAX.	Unit	Test Conditions
DC Current Gain Current Gain Group-16 -25 -40 Current Gain Group-16 -25 -40	H _{fe}	-10		250		V _{ce} =1.0V, I _c =100mA
		160		400		
		250		600		
		60				V _{ce} =1.0V, I _c =300mA
		100				
		170				
Collector-Emitter Saturation Voltage	V _{ce(sat)}			0.7		I _c =500mA, I _B =50mA
Base-Emitter Voltage	V _{bc}			1.2		V _{ce} =1.0V, I _c =300mA
Collector-Emitter Cutoff Current	I _{ces}			100		V _{ce} =45V,
				5.0		V _{ce} =25V, T _J =150°
Emitter-Base Cutoff Current	I _{ebo}			100		V _{eb} =4.0V
Gain Bandwidth Product	f _T	100				V _{ce} =5V, I _c =10mA f=50MHz
Collector-Base Capacitance	C _{cbo}			12		V _{cb} =10V, f=1.0MHz

Note: Device mounted on ceramic substrate 0.7mmX2.5mm² area.

DEVICE MARKING:

BC817-16=6A

BC817-25=6B

BC817-40=6C

Typical Characteristics

