

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Switching and amplification in high voltage
- Low current
- High voltage

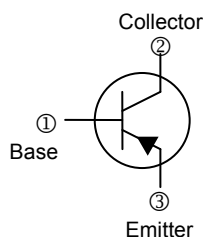
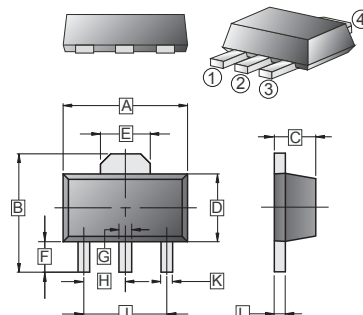
MARKING

5401

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

SOT-89



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.25	2.60	K	0.32	0.52
E	1.50	1.85	L	0.35	0.44
F	0.89	1.20			

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-160	V
Collector-Emitter Voltage	V _{CEO}	-150	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	I _C	-0.5	A
Collector Power Dissipation	P _C	0.5	W
Thermal Resistance Junction to Ambient	R _{θJA}	250	°C/W
Junction and Storage temperature	T _J , T _{STG}	150, -55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-160	-	-	V	I _C = -100μA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-150	-	-	V	I _C = -1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-	-	V	I _E = -10μA, I _C =0
Collector Cut-Off Current	I _{CB0}	-	-	-50	nA	V _{CB} = -120V, I _E =0
Emitter Cut-Off Current	I _{EBO}	-	-	-50	nA	V _{EB} = -3V, I _C =0
DC Current Gain	h _{FE(1)}	50	-	-		V _{CE} = -5V, I _C = -1mA
	h _{FE(2)}	60	-	300		V _{CE} = -5V, I _C = -10mA
	h _{FE(3)}	50	-	-		V _{CE} = -5V, I _C = -50mA
Collector-Emitter Saturation Voltage	V _{CE(sat)1}	-	-	-0.2	V	I _C = -10mA, I _B = -1mA
	V _{CE(sat)2}	-	-	-0.5	V	I _C = -50mA, I _B = -5mA
Base-Emitter Saturation Voltage	V _{BE(sat)1}	-	-	-1	V	I _C = -10mA, I _B = -1mA
	V _{BE(sat)2}	-	-	-1	V	I _C = -50mA, I _B = -5mA
Transition Frequency	f _T	100	-	300	MHz	V _{CE} = -10V, I _C = -10mA, f=100MHz
Collector Capacitance	C _C	-	6	-	pF	V _{CB} = -10V, I _E =0, f=1MHz
Noise Figure	NF	-	8	-	dB	V _{CE} = -5V, I _C = -200μA, f=10Hz~15.7kHz, R _S =10Ω

CHARACTERISTIC CURVES

Static Characteristic

