

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

SOT-23

FEATURES

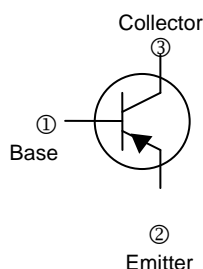
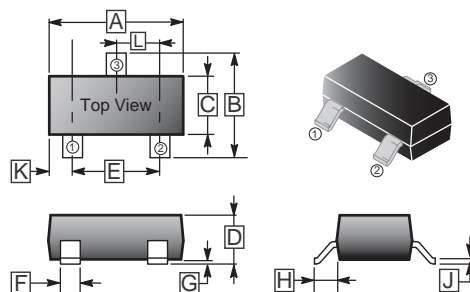
- High Voltage Transistor

MARKING

4D

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector - Base Voltage	V_{CBO}	-400	V
Collector - Emitter Voltage	V_{CEO}	-400	V
Emitter - Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-0.1	A
Collector Power Dissipation	P_C	350	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$I_C = 100\mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	-400	-	-	V
Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}, I_B = 0$	$V_{(BR)CEO}$	-400	-	-	V
Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	-5	-	-	V
Collector Cut-Off Current	$V_{CB} = -400\text{V}, I_E = 0$	I_{CBO}	-	-	-0.1	μA
Emitter Cut-Off Current	$V_{EB} = -4\text{V}, I_C = 0$	I_{EBO}	-	-	-0.1	μA
DC Current Gain ¹	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	h_{FE}	70	-	-	
	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$		80	-	300	
	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$		40	-	-	
	$V_{CE} = -10\text{V}, I_C = -100\text{mA}$		40	-	-	
Collector-Emitter Saturation Voltage ¹	$I_C = -10\text{mA}, I_B = -1\text{mA}$	$V_{CE(sat)}$	-	-	-0.2	V
	$I_C = -50\text{mA}, I_B = -5\text{mA}$		-	-	-0.3	V
Base-Emitter Saturation Voltage ¹	$I_C = -10\text{mA}, I_B = -1\text{mA}$	$V_{BE(sat)}$	-	-	-0.75	V
Transition frequency	$V_{CE} = -20\text{V}, I_C = -10\text{mA}$	f_T	50	-	-	MHz

Note:

1. Pulse test

CHARACTERISTIC CURVES

