Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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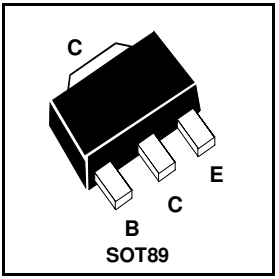
SOT89 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 – JANUARY 1996 ✪

BST40

COMPLEMENTARY TYPE – BST15

PARTMAKING DETAIL — AT2



SOT89

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	250	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	1	A
Continuous Collector Current	I_C	500	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	300		V	I_C=100μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	250		V	I_C=1mA, I_B=0*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		V	I_E=100μA, I_C=0
Emitter Cut-Off Current	I_{EBO}		10	μA	V_{EB}=5V, I_E=0
Collector Cut-Off Current	I_{CBO}		20	nA	V_{CB}=300V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.5	V	I_C=50mA, I_B=4mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		1.3	V	I_C=50mA, I_B=4mA
Static Forward Current Transfer Ratio	h_{FE}	40			I_C=20mA, V_{CE}=10V*
Transition Frequency	f_T	70		MHz	I_C=10mA, V_{CE}=10V, f=5MHz
Output Capacitance	C_{obo}		2	pF	V_{CB}=10V, f=1MHz
Input Capacitance	C_{ibo}		30	pF	V_{EB}=5V, f=1MHz

* Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%
For typical characteristics graphs see FMMTA42 datasheet.