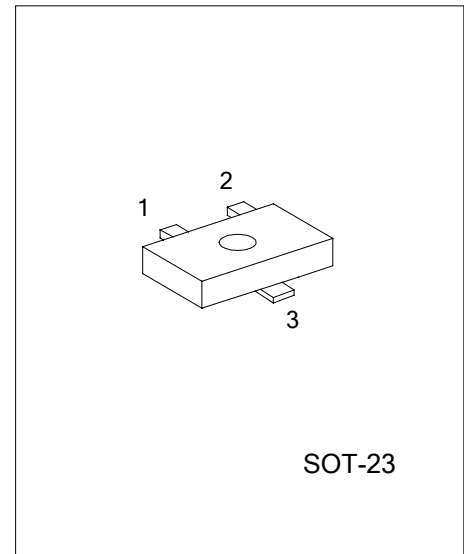
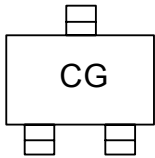


GENERAL PURPOSE TRANSISTOR

MARKING



1: Emitter 2: Base 3: Collector
*Pb-free plating product number: BCX70L

ABSOLUTE MAXIMUM RATINGS

(Ta = 25°C unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CB0}	45	V
Collector-Emitter Voltage	V_{CE0}	45	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	200	mA
Collector Power Dissipation	P_C	350	mW
Storage Temperature	T_{STG}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

(Ta = 25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=2.0mA, I_B=0$	45			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=1.0\mu F, I_C=0$	5			V
Collector Cut-off Current	I_{CES}	$V_{CE}=32V, V_{BE}=0$			20	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4V, I_C=0$			20	nA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=10\mu A$	100			
		$V_{CE}=5V, I_C=2.0mA$	380		630	
		$V_{CE}=1V, I_C=50mA$	100			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=0.25mA$			0.35	V
		$I_C=50mA, I_B=1.25mA$			0.55	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=0.25mA$	0.6		0.85	V
		$I_C=50mA, I_B=1.25mA$	0.7		1.05	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C=2.0mA, V_{CE}=5V$	0.55		0.75	V
Current Gain Bandwidth Product	f_T	$I_C=10mA, V_{CE}=5V, f=100MHz$	125			MHz
Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$			4.5	pF
Noise Figure	NF	$V_{CE}=5V, I_C=0.2mA, R_S=2K\Omega, f=1KHz$			6	dB
Turn On Time	t_{ON}	$I_C=10mA, I_{B1}=1.0mA$			150	ns
Turn Off Time	t_{OFF}	$V_{BB}=3.6V, I_{B2}=1.0mA, R_1=R_2=5K\Omega, R_L=990\Omega$			800	ns

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