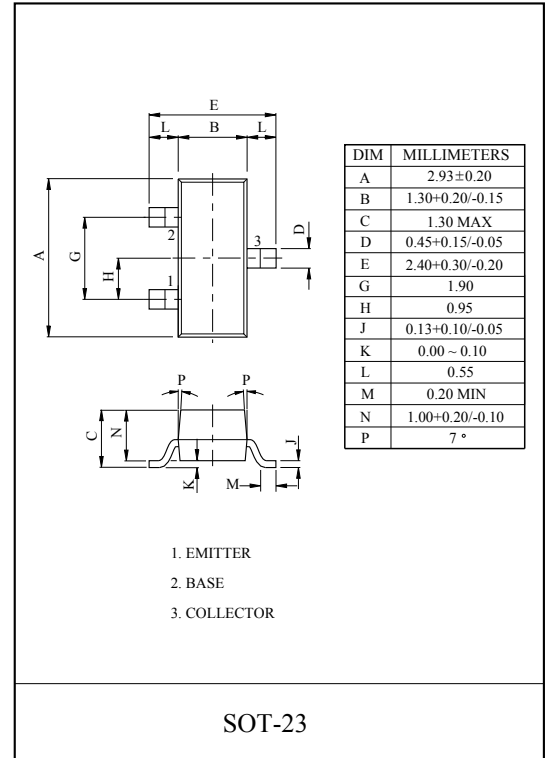


HIGH CURRENT APPLICATION.

MAXIMUM RATING (Ta=25°C)

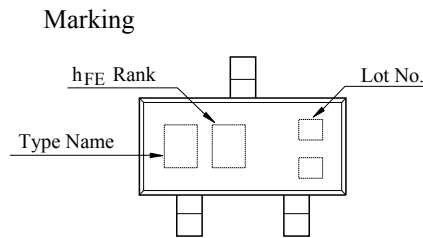
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-800	mA
Emitter Current	I_E	800	mA
Collector Power Dissipation	P_C^*	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

* : Package Mounted On 99.9% Alumina 10×8×0.6mm.



MARK SPEC

TYPE	MARK
BCW68F	DF
BCW68G	DG



BCW68

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-45	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	-5.0	-	-	V
Collector Cut-off Current		I_{CES}	$V_{EB}=0V, V_{CE}=-45V$	-	-	-20	nA
			$T_a=150^\circ C, V_{EB}=0V, V_{CE}=-45V$	-	-	-20	μA
Emitter Cut-off Current		I_{EBO}	$I_C=0, V_{EB}=-4V$	-	-	-20	nA
DC Current Gain	Group F	h_{FE}	$V_{CE}=-1V, I_C=-10mA$	75	-	-	
	Group G			120	-	-	
	Group F		$V_{CE}=-1V, I_C=-100mA$	100	-	250	
	Group G			160	-	400	
	Group F		$V_{CE}=-1V, I_C=-500mA$	35	-	-	
	Group G			60	-	-	
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-	-1.25	V
			$I_C=-500mA, I_B=-50mA$	-	-	-2.0	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-	-0.3	V
			$I_C=-500mA, I_B=-50mA$	-	-	-0.7	
Transition Frequency		f_T	$I_C=-80mA, V_{CE}=-10V, f=100MHz$	100	-	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	-	-	18	pF
Collector Input Capacitance		C_{ib}	$V_{EB}=-0.5V, f=1MHz$	-	-	80	pF
Noise Figure		NF	$I_C=-0.2mA, V_{CE}=-5V,$ $R_g=1k\Omega, f=1kHz$	-	2.0	10	dB