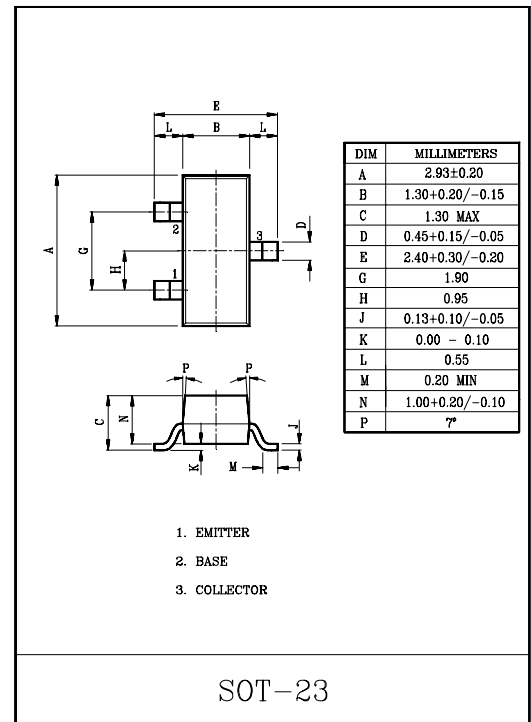


GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

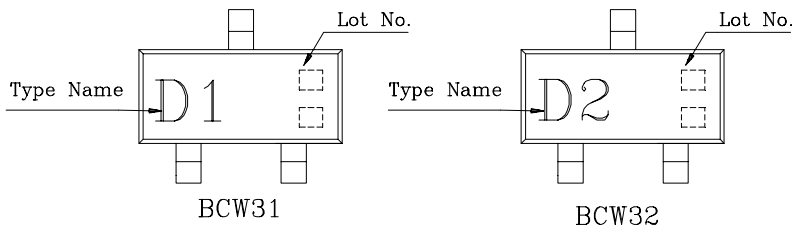
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Collector Power Dissipation	P_C *	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

P_C *:Package Mounted On 99.5% Alumina 10×8×0.6mm.



Marking



BCW31/32

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage		V_{CBO}	$I_C=10\mu A$	30	-	-	V
Collector-Emitter Breakdown Voltage		V_{CEO}	$I_C=2mA$	20	-	-	V
Emitter-Base Breakdown Voltage		V_{EBO}	$I_E=10\mu A$	5	-	-	V
Collector Cut-off Current		I_{CBO}	$V_{CB}=30V$	-	-	100	nA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5V$	-	-	100	nA
DC Current Gain	BCW31	h_{FE}	$V_{CE}=5V, I_C=2mA$	110	-	220	
	BCW32			200	-	450	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	-	0.25	V
Base-Emitter On Voltage		$V_{BE(ON)}$	$V_{CE}=5V, I_C=2mA$	0.55	-	0.7	V
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4	pF
Noise Figure		NF	$V_{CE}=5V, I_C=0.2mA$ $R_S=2k\Omega, f=1kHz$	-	-	10	dB