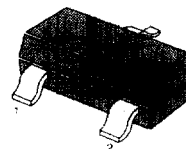


GENERAL PURPOSE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_A=25 °C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	32	V
Collector-Emitter Voltage	V _{CEO}	32	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	100	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{STG}	150	°C

SOT-23



1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25 °C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =2mA, I _B =0	32		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =1μA, I _C =0	5		V
Collector Cut-off Current	I _{CES}	V _{CB} =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 =10μA	20		
	:BCW60B		40		
	:BCW60C		100		
	:BCW60A	V _{CE} =5V, I _C =2mA	120	220	
	:BCW60B		180	310	
	:BCW60C		250	460	
	:BCW60D		380	630	
	:BCW60A	V _{CE} =1V, I _C =50mA	60		
	:BCW60B		70		
	:BCW60C		90		
	:BCW60D		100		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =50mA, I _B =1.25mA		0.55	V
		I _C =10mA, I _B =0.25mA		0.35	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =50mA, I _B =1.25mA	0.7	1.05	V
		I _C =10mA, I _B =0.25mA	0.6	0.85	V
Base-Emitter On Voltage	V _{BE(sat)}	V _{CE} =5V, I _C =2mA	0.55	0.75	V
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0		4.5	pF
		f=1MHz			
Current Gain-Bandwidth Product	f _T	I _C =10mA, V _{CE} =5V	125		MHz
Noise Figure	NF	I _C =0.2mA, V _{CE} =5V		6	dB
		R _G =2kΩ, f=1KHz			
Turn On Time	t _{ON}	I _C =10mA, I _{B1} =1mA		150	ns
Turn Off Time	t _{OFF}	V _{BB} =3.6V, I _{B2} =1mA		800	ns
		R1=R2=5kΩ, R _L =990Ω			

MARKING CODE

TYPE	BCW60A	BCW60B	BCW60C	BCW60D
MARK.	AA	AB	AC	AD

Marking

