

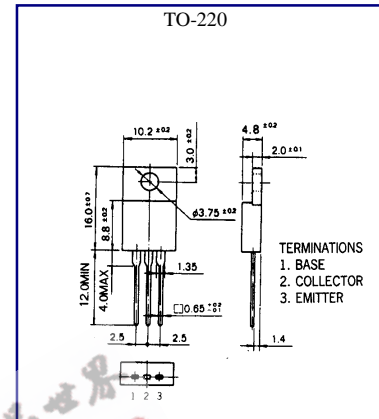


BDX53/A/B/C

NPN EPITAXIAL SILICON TRANSISTOR

POWER DARLINGTON TR HAMMER DRIVERS, AUDIO AMPLIFIERS APPLICATION
POWER LINEAR AND SWITCHING APPLICATIONS

●Complementary to BDX54/54A/54B/54C respectively



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage :BDX53	VCBO	45	V
:BDX53A		60	V
:BDX53B		80	V
:BDX53C		100	V
Collector-Emitter Voltage :BDX53	VCEO	45	V
:BDX53A		60	V
:BDX53B		80	V
:BDX53C		100	V
Emitter-Base voltage	VEBO	5	V
Collector Current (DC)	IC	8	A
Collector Current (Pulse)	IC	12	A
Base Current (DC)	IB	0.2	A
Collector Dissipation (Tc=25°C)	PC	60	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-50~150	°C

Wing Shing Computer Components Co., (H.K.)Ltd.
Homepage: <http://www.wingshing.com>

Tel:(852)2341 9276 Fax:(852)2797 8153
E-mail: wsccltd@hkstar.com

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Sustaining Voltage	:BDX53 :BDX53A :BDX53B :BDX53C	$V_{CE(SUS)}$	$I_C=100mA, I_B=0$	45 60 80 100		V V V V
Collector Cutoff Current	:BDX53 :BDX53A :BDX53B :BDX53C	I_{CBO}	$V_{CB}=45V, I_E=0$ $V_{CB}=60V, I_E=0$ $V_{CB}=80V, I_E=0$ $V_{CB}=100V, I_E=0$		200 200 200 200	μA μA μA μA
Collector Cutoff Current	:BDX53 :BDX53A :BDX53B :BDX53C	I_{CEO}	$V_{CE}=22V, I_C=0$ $V_{CE}=30V, I_C=0$ $V_{CE}=40V, I_C=0$ $V_{CE}=50V, I_C=0$		500 500 500 500	μA μA μA μA
Emitter Cutoff Current		I_{EBO}	$V_{EB}=5V, I_C=0$		2	mA
DC Current Gain		h_{FE}	$V_{CE}=3V,$	750		V
Collector- Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=3A$		2	V
Base- Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=3A, I_B=12mA$		2.5	V
Parallel Diode Forward Voltage		V_f	$I_C=3A, I_B=12mA$ $I_f=3A$ $I_f=8A$	1.8 2.5	2.5	V V

