CDIL
DATA
SHEET

HIGH VOLTAGE SILICON
POWER SWITCHING
TRANSISTOR

BU 536
TO-3 NPN
8A, 75W

SWITCH MODE CTV POWER SUPPLY APPLICATION

ABSOLUTE MAXIMUM RATINGS :(Ta=25deg C)

RATING	SYMBOL	VALUE	UNIT
Collector Emitter Voltage	VCES	1100	V
Collector Emitter (sus) Voltage	VCEO	480	V
Collector Current Continuous	IC	8.0	A
Peak	ICM	10	A
Base Current Continuous	IB	4.0	A
Peak	IBM	4.0	A
Total Power Dissipation upto Tmb=25 deg C	PD	62	W
Storage Temperature	Tstg	-65 to + 150	deg C
Junction Temperature	Tj	150	deg C
Thermal Resistance from Junction to case	Rth (j-c)	2	deg C/W

CONTD...2

ELECTRICAL CHARACTERISTICS (TA=25 deg C unless otherwise specified)

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector Emitter (sus) Voltage	VCEO(sus)	IC=100mA, IB=0	480	-	V
Emitter Base Voltage	VEBO	IE=10uA, IC=0	6.0	-	V
Collector Cut-off Current	ICES	VCE=1100V, VBE=0	-	1.0	mA
		VCE=1100V, VBE=0 T case=125 deg C	-	2.0	mA
DC Current Gain	hFE	IC=1A, VCE=5V	10	-	
		IC=4A, VCE=5V	5.5	-	
Base Emitter (sat) Voltage	VBE(sat)*	IC=4A,IB=0.8A	-	2.0	V

DYNAMIC CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Gain Bandwidth Product	fT	IC=0.5A,VCE=10V, f=1MHz		10 typ	MHz

SWITCHING CHARACTERISTICS

Fall Time	tf	IC=4A, IB1=IB2=1.25A tp=20uS	-	1.0	us
Turn-off time	toff		-	4.0	us