FORWARD INTERNATIONAL ELECTRONICS LTD.

SEMICONDUCTOR
TECHNICAL DATA

MJ13001

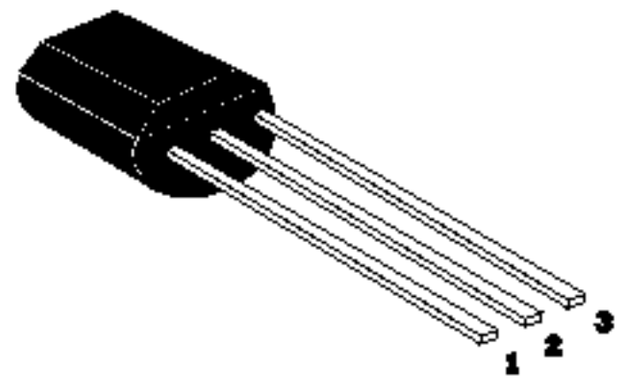
NPN EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

2

* Collector-Emitter Voltage Vceo=400V
* Collector Dissipation Pc(Max)=625 mW (Ta=25^{0}C)

Package: TO-92



PIN: / STYLE	1	2	3
NO.1	E	C	B

ABSOLUTE MAXIMUM RATINGS at Tamb=25^{0}C

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	450	V
Collector-Emitter Voltage	Vceo	400	V
Emitter-Base Voltage	Vebo	7	V
Collector Current	Ic	200	mA
Collector Dissipation	Pc	625	m W
Junction Temperature	Tj	150	^{0}C
Storage Temperature	Tstg	-55~150	^{0}C

ELECTRICAL CHARACTERISTICS at Tamb=25^{0}C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	450			V	Ic=100uA Ie=0
Collector-Emitter Breakdown Voltage	BVceo	400			V	Ic=1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	7			V	Ie=100uA Ic=0
Collector Cutoff Current	Icbo			10	u A	Vcb=420V Ie=0
Emitter Cutoff Current	Iebo			10	u A	Veb=7V Ic=0
DC Current Gain	Hfe	8		40		Vce=10V Ic=5mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.4	V	Ic=50mA Ib=10mA
Base-Emitter Saturation Voltage	Vbe(sat)			1	V	Ic=50mA Ib=10mA
Current Gain-Bandwidth product	fT	10			MHz	Vce=10V Ic=10mA
						f=1MHz