



MJE13002A

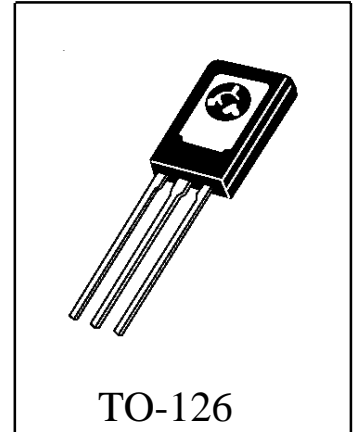
SILICON NPN TRIPLE DIFFUSED MESA TYPE

APPLICATION:

ELECTRONIC TRANSFORMERS ,
POWER SWITCHING CIRCUIT

MAXIMUM RATINGS (Tc=25 ℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	VCBO	600	V
Collector-Emitter Voltage	VCEO	400	V
Emitter-Base Voltage	VEBO	9	V
Collector Current	Ic	1	A
Collector Power Dissipation	Pc	20	W
Junction Temperature	T(vj)	150	℃
Storage Temperature Range	Tstg	-55~+150	℃



ELECTRICAL CHARACTERISTICS (Tc=25 ℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Collector-Emitter Sustaining Voltage	VCEO(sus)	Ic=10mA, IB=0	400	-	V
Collector-Base Breakdown Voltage	V(BR)CBO	IE=0, Ic=1mA	600	-	V
Emitter-Base Breakdown Voltage	V(BR)EBO	IE=1mA, IC=0	9	-	V
Collector-Base Cut off current	ICBO	VCB=600V IE=0	-	100	μ A
Collector-Emitter Cut off Current	ICEO	VCE=400V IB=0	-	50	μ A
Emitter-Base Cut off Current	IEBO	VEB=7V Ic=0	-	10	μ A
Small-signal Current Gain	hFE	VCE=10V, Ic=0.1A,	10	40	-
Collector-Emitter Saturation Voltage	VCE(sat)	Ic=0.5A, IB=0.1A	-	1.2	V
Base-Emitter Saturation Voltage	VBE(sat)	Ic=0.5A, IB=0.1A	-	1.1	V
Fall Time	tf	Ic=1A	-	0.7	μ S
Storage Time	ts	IB1=-1 IB2=0.2A	-	3	μ S
Frequency Characteristics	fT	VCE=10V, IC=0.1A, f=1MHz	4	-	MHz