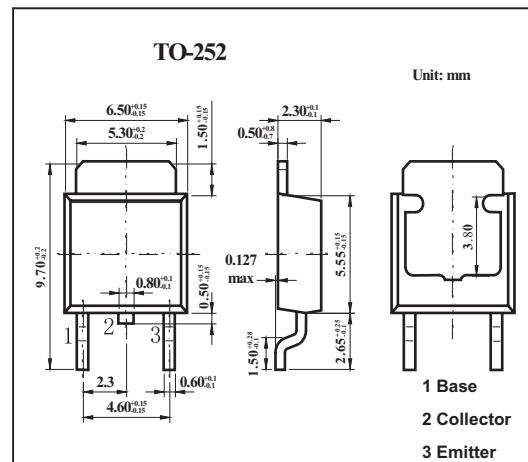


NPN Epitaxial Silicon Transistor

MJD47;MJD50

■ Features

- Load Formed for Surface Mount Application
- Straight Lead



■ Absolute Maximum Ratings Ta = 25°C unless otherwise noted

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage MJD47 MJD50	V _{CBO}	350	V
		500	V
Collector-Emitter Voltage MJD47 MJD50	V _{C EO}	250	V
		400	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current (DC)	I _C	1	A
Collector Current (Pulse)	I _{CP}	2	A
Base Current	I _B	0.6	A
Collector Dissipation (TC=25°C)	P _C	15	W
Collector Dissipation (Ta=25°C)		1.56	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-65 to 150	°C

■ Electrical Characteristics Ta = 25°C unless otherwise noted

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-Emitter Sustaining Voltage * MJD47 MJD50	V _{C EO(sus)}	I _C = 30mA, I _B = 0	250			V
			400			V
Collector Cut-off Current MJD47 MJD50	I _{CEO}	V _{C E} = 150V, I _B = 0			0.2	mA
		V _{C E} = 300V, I _B = 0			0.2	mA
Collector Cut-off Current MJD47 MJD50	I _{CES}	V _{C E} = 350, V _{E B} = 0			0.1	mA
		V _{C E} = 500, V _{E B} = 0			0.1	mA
Emitter Cut-off Current	I _{EBO}	V _{E B} = 5V, I _C = 0			1	mA
DC Current Gain *	h _{FE}	V _{C E} = 10V, I _C = 0.3A	30		150	
		V _{C E} = 10V, I _C = 1A	10			
Collector-Emitter Saturation Voltage *	V _{C E(sat)}	I _C = 1A, I _B = 0.2A			1	V
Base-Emitter Saturation Voltage *	V _{B E(sat)}	V _{C E} = 10A, I _C = 1A			1.5	V
Current Gain Bandwidth Product	f _T	V _{C E} = 10V, I _C = 0.2A	10			MHz

*Pulse Test: PW≤300μs, Duty Cycle≤2%