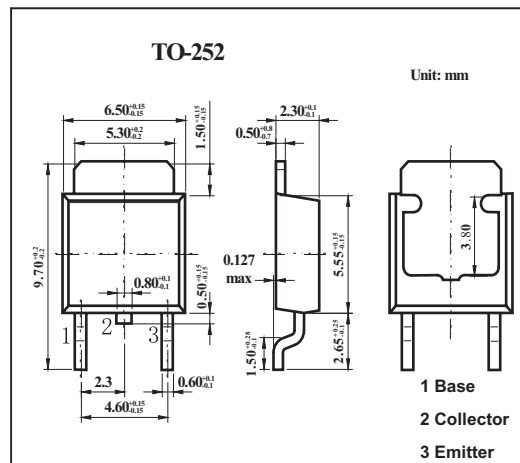


# MJD47;MJD50

■ 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	V <sub>CB0</sub>	350	V
		MJD50	500
Collector-Emitter Voltage MJD47	V <sub>CEO</sub>	250	V
		MJD50	400
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current (DC)	I <sub>C</sub>	1	A
Collector Current (Pulse)	I <sub>CP</sub>	2	A
Base Current	I <sub>B</sub>	0.6	A
Collector Dissipation (TC=25°C)	P <sub>C</sub>	15	W
Collector Dissipation (Ta=25°C)		1.56	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-65 to 150	°C

■ Electrical Characteristics Ta = 25°C unless otherwise noted

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-Emitter Sustaining Voltage * MJD47	V <sub>CEO(sus)</sub>	I <sub>C</sub> = 30mA, I <sub>B</sub> = 0	250			V
			MJD50	400		
Collector Cut-off Current	I <sub>CEO</sub>	V <sub>CE</sub> = 150V, I <sub>B</sub> = 0			0.2	mA
		V <sub>CE</sub> = 300V, I <sub>B</sub> = 0			0.2	mA
Collector Cut-off Current	I <sub>CES</sub>	V <sub>CE</sub> = 350, V <sub>EB</sub> = 0			0.1	mA
		V <sub>CE</sub> = 500, V <sub>EB</sub> = 0			0.1	mA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>BE</sub> = 5V, I <sub>C</sub> = 0			1	mA
DC Current Gain *	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 0.3A	30		150	
		V <sub>CE</sub> = 10V, I <sub>C</sub> = 1A	10			
Collector-Emitter Saturation Voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> = 1A, I <sub>B</sub> = 0.2A			1	V
Base-Emitter Saturation Voltage *	V <sub>BE(sat)</sub>	V <sub>CE</sub> = 10A, I <sub>C</sub> = 1A			1.5	V
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 0.2A	10			MHz

\*Pulse Test: PW ≤ 300μs, Duty Cycle ≤ 2%