TIGER ELECTRONIC CO.,LTD

RoHS COMPLIANT

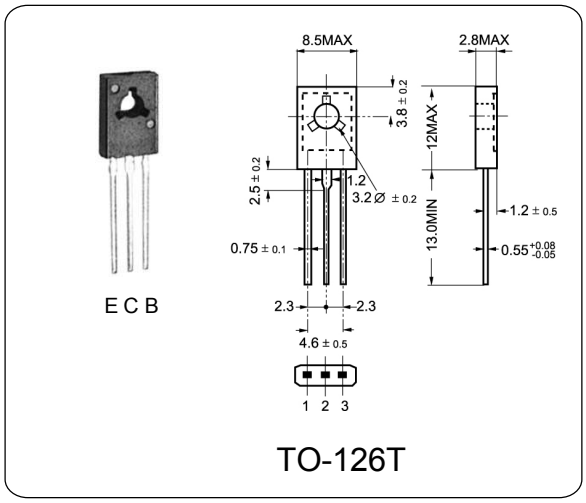
Product specification

NPN Epitaxial Silicon Darlington Transistor

MJE802G

Monolithic Construction With Built-in Base-Emitter Resistors

. High DC Current Gain : h_{FE}= 750 (Min.)
@ I_C= 1.5 and 2.0A DC

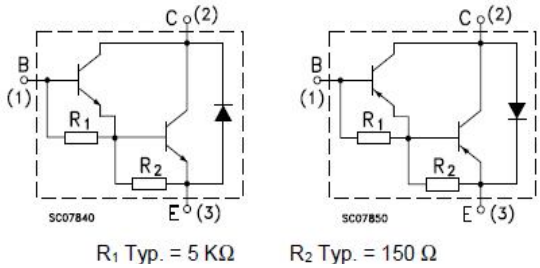


TO-126T

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	4.0	A
Base Current	I_B	0.1	A
Total Dissipation at	P_{tot}	40	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C

INTERNAL SCHEMATIC DIAGRAM



R_1 Typ. = 5 KΩ R_2 Typ. = 150 Ω

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CEO}	V_{CE}=80V, I_B=0	—	—	0.1	mA
Collector Cut-off Current	I_{CBO}	V_{CB}=80V, I_E=0	—	—	0.1	mA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	—	—	2.0	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=30mA, I_B=0	80	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=3V, I_C=1.5A	1000	—	—	
	$h_{FE(2)}$	V_{CE}=3V, I_C=2.0A	750	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2.0A,I_B=40mA	—	—	2.8	V
		I_C=1.5A,I_B=30mA	—	—	2.5	
Base-Emitter Voltage	$V_{BE(on)}$	V_{CE}=3V,I_C=2.0A	—	—	2.5	V