TIGER ELECTRONIC CO.,LTD

Product specification

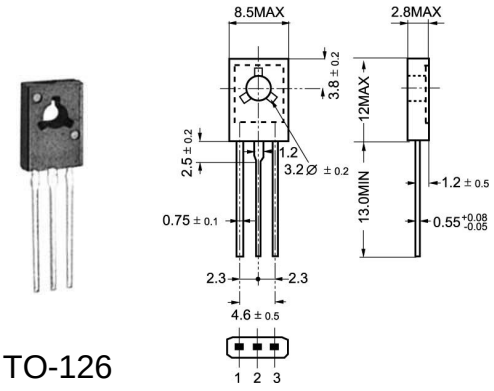
Complementary Silicon Power Ttransistors — 2SD1691 / 2SB1151

DESCRIPTION

It is intented for use in power
amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	7.0	V
Collector Current	I_C	5.0	A
Collector Peak Current	$I_{C(peak)}$	8.0	A
Total Dissipation at	P_{tot}	20	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



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ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=50V, I_E=0	—	—	10	uA
Emitter Cut-off Current	I_{EBO}	V_{EB}=7.0V, I_C=0	—	—	10	uA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=10mA, I_B=0	60	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V, I_C=0.1A	60	—	—	
	$h_{FE(2)}$	V_{CE}=1.0V, I_C=2.0A	100	—	400	
	$h_{FE(3)}$	V_{CE}=1.0V, I_C=5.0A	50	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2.0A,I_B=0.2A	—	—	0.3	V
Base - Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=2.0A,I_B=0.2A	—	—	1.2	V
Storage Time	t_{stg}	I_C=2.0A, I_{B1}=-I_{B2}=0.2A	—	—	2.5	us

hfe(2): M 100~200, L 160~320, K 200~400