



TO-251 Plastic-Encapsulated Transistors

3DA752 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 1.2 W ($T_{amb}=25^{\circ}\text{C}$)

Collector current

I_{CM} : 2 A

Collector-base voltage

$V_{(BR)CBO}$: 40 V

Operating and storage junction temperature range

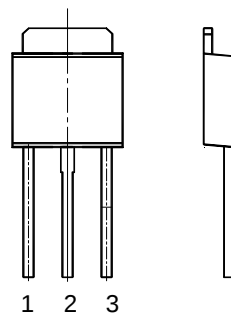
T_J, T_{stg} : -55°C to $+150^{\circ}\text{C}$

TO-251

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	100		400	
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=2\text{A}, I_B=0.2\text{A}$			0.8	V
	$V_{CE(sat)2}$	$I_C=1.5\text{A}, I_B=30\text{mA}$			2	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=500\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		13		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	G
Range	100-200	160-320	200-400
Marking			