



## TO-251 Plastic-Encapsulated Transistors

### 3DA752 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$$P_{CM}: 1.2 \text{ W (Tamb=25°C)}$$

Collector current

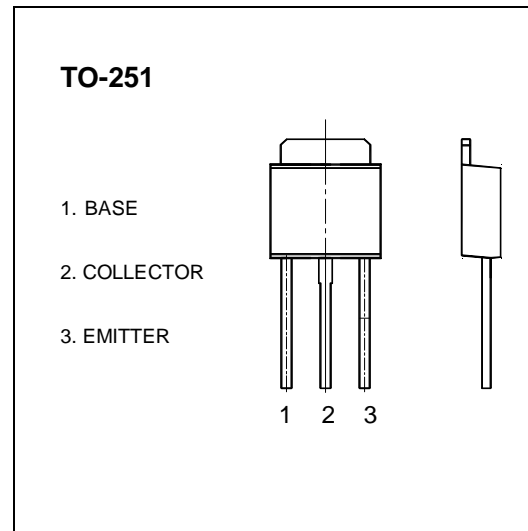
$$I_{CM}: 2 \text{ A}$$

Collector-base voltage

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

Operating and storage junction temperature range

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



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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

#### CLASSIFICATION OF $h_{FE(1)}$

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