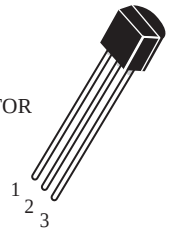
WEITRON

MPSA43

High-Voltage NPN Transistors

Lead(Pb)-Free



TO-92

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	200	Vdc
Collector-Base Voltage	V_{CBO}	200	Vdc
Emitter-Base Voltage	V_{EBO}	6.0	Vdc
Collector Current	I_C	500	mAdc
Total Device Dissipation T_A=25°C	P_D	0.625	W
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

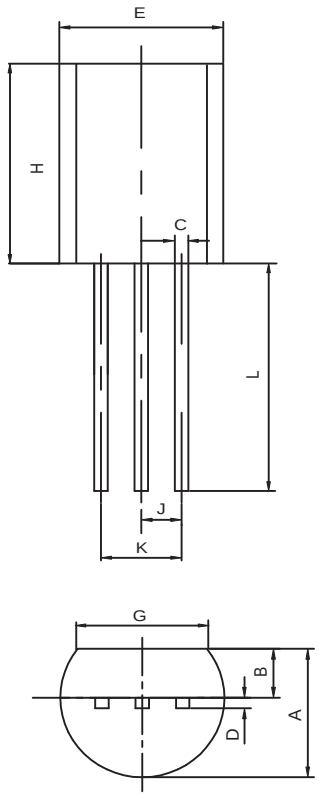
Characteristics	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I_C= 1.0 mAdc, I_B=0)	$V_{(BR)CEO}$	200	-	Vdc
Collector-Base Breakdown Voltage (I_C= 100 uAdc, I_E=0)	$V_{(BR)CBO}$	200	-	Vdc
Emitter-Base Breakdown Voltage (I_E= 100 uAdc, I_C=0)	$V_{(BR)EBO}$	6.0	-	Vdc
Collector Cutoff Current (V_{CB}= 160Vdc, I_E=0)	I_{CBO}	-	0.1	µA
Emitter Cutoff Current (V_{EB}= 4.0Vdc, I_C=0)	I_{EBO}	-	0.1	µA

Electrical Characteristics (T_A=25°C unless otherwise noted) (Countinued)

Characteristics	Symbol	Min	Max	Unit
On Characteristics				
DC Current Gain (I_C= 1.0 mAdc, V_{CE}=10Vdc) (I_C= 10 mAdc, V_{CE}= 10Vdc) (I_C= 30 mAdc, V_{CE}= 10Vdc)	 $H_{FE(1)}$ $H_{FE(2)}$ $H_{FE(3)}$	 25 40 40	 - -	 - -
Collector-Emitter Saturation Voltage (I_C= 20 mAdc, I_B= 2.0 mAdc)	$V_{CE(sat)}$	-	0.4	Vdc
Base-Emitter Saturation Voltage (I_C= 20 mAdc, I_B= 2.0 mAdc)	$V_{BE(sat)}$	-	0.9	Vdc
Transistion Frequency (I_C= 10 mAdc, V_{CE}= 20 Vdc, f=100MHz)	f_T	50	-	MHz

TO-92 Outline Dimensions

unit:mm



TO-92		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.10	1.40
C	0.38	0.55
D	0.36	0.51
E	4.40	4.70
G	3.43	-
H	4.30	4.70
J	1.270TYP	
K	2.44	2.64
L	14.10	14.50