

### KTC3205 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$P_{CM}$ : 1 W ( $T_{amb}=25^{\circ}C$ )

Collector current

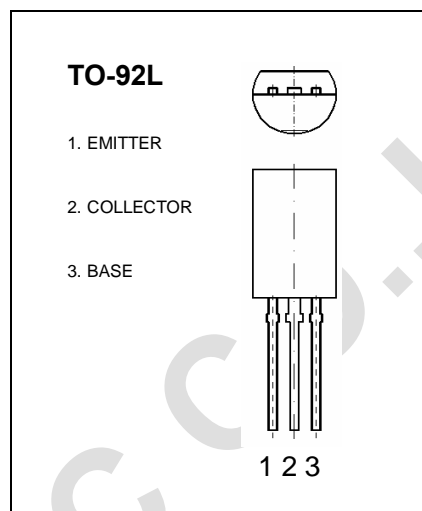
$I_{CM}$ : 2 A

Collector-base voltage

$V_{(BR)CBO}$ : 30 V

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	30			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	$I_{CBO}$	$V_{CB}=30V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=2V, I_C=500mA$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1.5A, I_B=30mA$			2.0	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=2V, I_C=500mA$			1.0	V
Transition frequency	$f_T$	$V_{CE}=2V, I_C=500mA$		80		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0V, f=1MHz$		13		pF

#### CLASSIFICATION OF $h_{FE}$

Rank	O	Y
Range	100-200	160-320