

**BDY26C**

**MECHANICAL DATA**  
Dimensions in mm

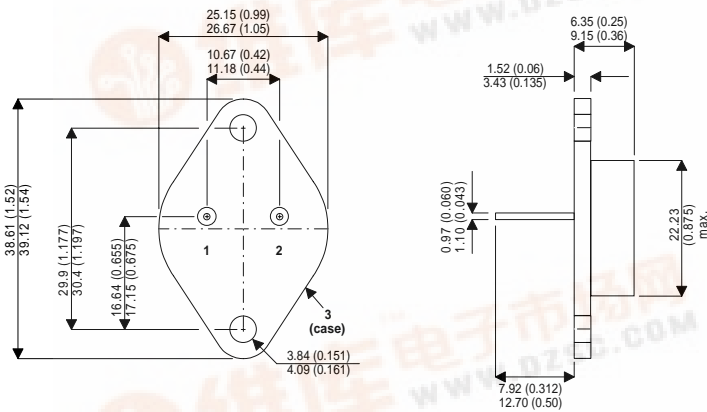
**HIGH CURRENT  
NPN SILICON TRANSISTOR**

**FEATURES**

- HIGH SWITCHING CURRENTS
- HIGH RELIABILITY
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS
- JAN LEVEL SCREENING OPTIONS

**APPLICATIONS**

- SWITCHING REGULATORS
- LINEAR APPLICATIONS



**TO3 (TO-204AA)**

Pin 1 – Base      Pin 2 – Emitter      Case – Collector

**ABSOLUTE MAXIMUM RATINGS** ( $T_{case} = 25^{\circ}C$  unless otherwise stated)

$V_{CBO}$	Collector – Base Voltage	300V
$V_{CEO}$	Collector – Emitter Voltage	180V
$V_{EBO}$	Emitter – Base Voltage	10V
$I_C$	Collector Current	6A
$I_B$	Base Current	3A
$P_{tot}$	Total Dissipation at $T_{case} = 25^{\circ}C$	87.5W
$T_{stg}$	Storage Temperature	-65 to +200°C
$T_J$	Maximum Operating Junction Temperature	200°C
$R_{\theta JC}$	Thermal Resistance (junction-case)	2°C/W

**ELECTRICAL CHARACTERISTICS** ( $T_{case} = 25^{\circ}C$  unless otherwise stated)

PARAMETER		TestConditions	Min.	Typ.	Max.	Unit
$I_{CEO}$	Collector Emitter Cut-Off Current	$V_{CE} = 180V$ $I_B = 0A$			1.0	mA
$I_{CES}$	Collector Emitter Cut-Off Current	$V_{CE} = 250V$ $V_{BE} = 0V$			1.0	
$I_{EBO}$	Emitter Base Cut-Off Current	$V_{EB} = 10V$ $I_C = 0A$			1.0	
$V_{(BR)CEO}^*$	Collector Emitter Breakdown Voltage	$I_C = 50mA$ $I_B = 0A$	180			V
$V_{(BR)CBO}^*$	Collector Base Breakdown Voltage	$I_C = 3mA$	300			
$V_{CE(sat)}^*$	Collector Emitter Saturation Voltage	$I_C = 2A$ $I_B = 0.25A$			0.6	
$V_{BE(sat)}^*$	Base Emitter Saturation Voltage	$I_C = 2A$ $I_B = 0.25A$			1.2	
$h_{FE}$	DC Current Gain	$I_C = 1A$ $V_{CE} = 4V$		90		
		$I_C = 2A$ $V_{CE} = 4V$	75	82	180	
$f_T$	Transition Frequency	$I_C = 0.5A$ $V_{CE} = 15V$ $f = 10MHz$	10			MHz
$t_{on}$	Turn On Time	$I_C = 5A$ $I_{B1} = 1A$			1	$\mu S$
$t_{off}$	Turn Off Time	$I_C = 5A$ $I_{B1} = -I_{B2} = 1A$			6	

\*) Pulse test : Pulse Width < 300 $\mu s$  ,Duty Cycle < 2%