

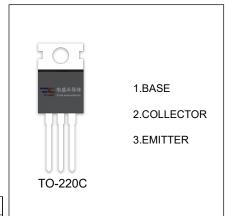
# **3DD13005ND66** 75\$16I6725 (131)

#### **FEATURES**

- 3RZHU VZiWFKiQJ DSSOiFDWiRQV
- \*RRG KiJK WHPSHUDWXUH
- /RZ VDWXUDWiRQ YROWDJH
- +iJK VSHHG VZiWFKiQJ

## MAXIMUM RATINGS (T<sub>a</sub>=25 \( \text{9 unless otherwise noted} \)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	&ROOHFWRU-%DVH 9ROWDJH	700	9
V <sub>CEO</sub>	&ROOHFWRU-(PiWWHU 9ROWDJH	420	9
$V_{EBO}$	(PiWWHU-%DVH 9ROWDJH	9	9
Ic	&ROOHFWRU &XUUHQW -&RQWiQXRXV	4	\$
Pc	&ROOHFWRU 3RZHU DiVViSDWiRQ	2	Ξ
R <sub>şJA</sub>	7KHUPDO 5HViVWDQFH IURP JXQFWiRQ WR \$PEiHQW	62.5	Я/ =
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55-150	Я



## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25 g unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	9(%5)&%2	I <sub>&amp;</sub> = 1P\$,I <sub>(</sub> =0	700			9
Collector-emitter breakdown voltage	9(%5)&(2	I <sub>&amp;</sub> = 10P\$,I <sub>%</sub> =0	420			9
Emitter-base breakdown voltage	9(%5)(%2	I <sub>(</sub> = 1P\$,I <sub>&amp;</sub> =0	9			9
Collector cut-off current	I <sub>&amp;%2</sub>	9 <sub>&amp;%</sub> =7009,I <sub>(</sub> =0			100	<b>⊠</b> \$
Collector cut-off current I <sub>&amp;(2</sub> 9 <sub>&amp;(</sub> =4009,I <sub>%</sub> =0				100	<b>∑</b> \$	
Emitter cut-off current	I <sub>(%2</sub>	9 <sub>(%</sub> =79,I <sub>&amp;</sub> =0			100	μ\$
	K <sub>)((1)</sub>	9 <sub>&amp;(</sub> =59, I <sub>&amp;</sub> =1\$	10		40	
DC current gain	K <sub>)((2)</sub>	9 <sub>&amp;(</sub> =59, I <sub>&amp;</sub> =200P\$	10		60	
DC current gain	K <sub>)((3)</sub>	9 <sub>&amp;(</sub> =59, I <sub>&amp;</sub> =10P\$	5			
	K <sub>)((4)</sub>	9 <sub>&amp;(</sub> =59, I <sub>&amp;</sub> =4\$	8		40	
	9 <sub>&amp;((VDW)(1)</sub>	I <sub>&amp;</sub> =1\$,I <sub>%</sub> =0.2\$			0.3	9
	9 <sub>&amp;((VDW)(2)</sub>	I <sub>8</sub> =2\$,I <sub>%</sub> =0.4\$	0.15		0.28	9
Collector-emitter saturation voltage		9	0.25		0.35	9
	9 <sub>&amp;((VDW)(3)</sub>	I <sub>8</sub> =4\$,I <sub>%</sub> =1\$			0.8	9
Base-emitter saturation voltage	9 <sub>%((VDW)</sub>	I <sub>&amp;</sub> =2\$,I <sub>%</sub> =0.5\$			1.6	9
Diode forward voltage	9)(&	I <sub>&amp;</sub> =2\$			2	9
Transition frequency	I <sub>7</sub>	9 <sub>&amp;(</sub> =109, I <sub>&amp;</sub> =0.5\$,I=10+]	5			0+]
Rise time	W <sub>U</sub>	W <sub>U</sub> I <sub>&amp;</sub> =250P\$			0.5	
Storage time	₩6	I <sub>&amp;</sub> =250P\$	2.0		4.0	⊠V
Fall time				0.5		

# CLASSIFICATION of $h_{\text{FE}(2)}$

Range   10~15   15~20   20~25   25~30   30~35   35~40   40~45   45~50   50~55   55~60
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#### **CLASSIFICATION** of $\mathbb{W}_6(\boxtimes V)$

Rank	А		В		
	A1	A2	B1	B2	
Range	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0	



