

**3DD159(161), 3DD162(163)****NPN Silicon Low Frequency High Power Transistor****Features:**

1. Using triple-diffusion process.Excellent capacity in anti-burnout.Excellent second breakdown capacity.
2. Good temperature stability.Excellent thermal fatigue capability.
3. Implementation of standards: GJB33 A-97, QZJ840611A, QZJ840611
4. Use for Low-speed switch,low frequency power amplify,power adjustment.
5. Quality Class: JP, JT, JCT, GS, G, G+

**TECHNICAL DATA:****(Ta = 25°C )**

Parameter name	Symbols	Unit	Specifications					
			3DD159			3DD162		
			A	B	C	D	E	F
Collector-Emitter Voltage	$V_{CEO}$	V	50	100	150	200	250	300
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	50	100	150	200	250	300
C-Base Breakdown Voltage	$V_{(BR)CBO}$	V	3DD159: $I_c=3mA$			3DD162: $I_c=3mA$		
			80	150	200	250	350	400
Emitter-Base Voltage	$V_{EBO}$	V	5			5		
Max. Collector Current	$I_{CM}$	A	5.0			7.5		
Max. Collector Dissipation	$P_{CM}$	W	50 ( $T_c \leq 75^\circ C$ )			75 ( $T_c \leq 75^\circ C$ )		
Junction Temperature	$T_{jm}$	$^\circ C$	175					
Storage Temperature	$T_{stg}$	$^\circ C$	-55~+175					
Collector-Emitter Leakage Current	$I_{CEO}$	mA	1.0 (A: $V_{CE}=30V$ ; B: $V_{CE}=50V$ ; C~F: $V_{CE}=100V$ )					
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	1.2 ( $I_c=2.5A, I_b=0.25A$ )			1.2 ( $I_c=3.75A, I_b=0.38A$ )		
DC Current Gain	$h_{FE}$		Max.:180,Min.:15 ( $V_{CE}=5V, I_c=2.5A$ )			Max.:180, Min.:15 ( $V_{CE}=5V, I_c=3.75A$ )		
E-Base Breakdown Voltage	$V_{(BR)EBO}$	V	$\geq 5$ ( $I_E=1mA$ )			$\geq 5$ ( $I_E=2mA$ )		

**h<sub>FE</sub> Colored:**

Color	Red	Orange	Yellow	Green	Blue	Purple
$h_{FE}$	15~25	25~40	40~55	55~80	80~120	120~180

**Outline and Dimensions:**