

**DESCRIPTION**

- Built-in Base-Emitter Shunt Resistors
- High DC current gain-  
 $h_{FE} = 750$  (Min) @  $I_C = -6A$
- Collector-Emitter Sustaining Voltage-  
 $V_{CEO(SUS)} = -100V$ (Min)
- Complement to type 2N6059

**APPLICATIONS**

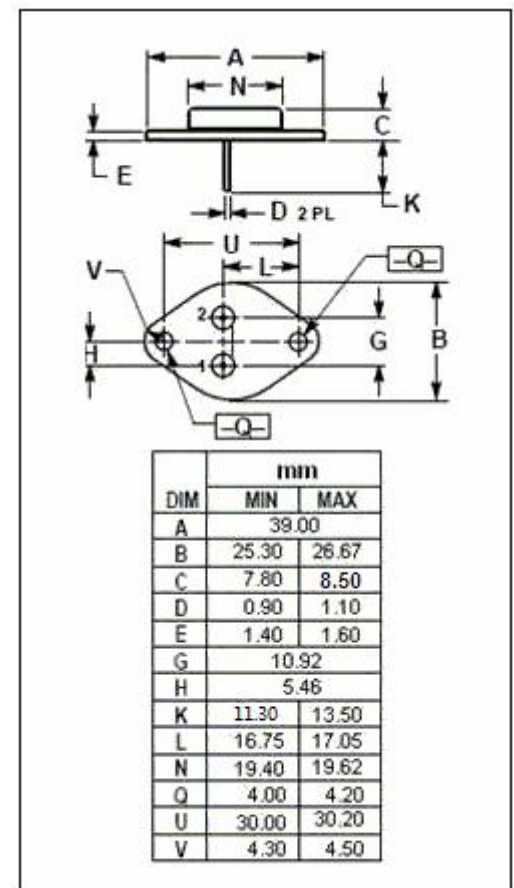
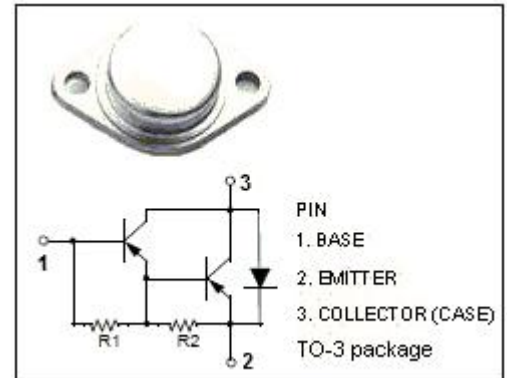
- Designed for general purpose amplifier and low frequency switching applications.

**ABSOLUTE MAXIMUM RATINGS( $T_C=25^\circ C$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-12	A
$I_{CM}$	Collector Current-Peak	-20	A
$I_B$	Base Current	-0.2	A
$P_C$	Collector Power Dissipation@ $T_C=25^\circ C$	150	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-65~150	$^\circ C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	ThermalResistance, Junction to Case	1.17	$^\circ C/W$



**ELECTRICAL CHARACTERISTICS**

$T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE0(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -50\text{mA}$ ; $I_B = 0$	-100		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -6\text{A}$ ; $I_B = -24\text{mA}$		-2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -12\text{A}$ ; $I_B = -120\text{mA}$		-3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -12\text{A}$ ; $I_B = -120\text{mA}$		4.0	V
$V_{BE(on)}$	Base-Emitter On voltage	$I_C = -6\text{A}$ ; $V_{CE} = -3\text{V}$		-2.8	V
$I_{CEO}$	Collector Cutoff current	$V_{CE} = -50\text{V}$ ; $I_B = 0$		-1.0	mA
$I_{CEX}$	Collector Cutoff current	$V_{CE} = -100\text{V}$ ; $V_{BE(off)} = -1.5\text{V}$ $V_{CE} = -100\text{V}$ ; $V_{BE(off)} = -1.5\text{V}$ ; $T_C = 150^{\circ}\text{C}$		-0.5 -5.0	mA
$I_{EBO}$	Emitter Cut-off current	$V_{EB} = -5\text{V}$ ; $I_C = 0$		-2.0	mA
$h_{FE-1}$	DC Current Gain	$I_C = -6\text{A}$ ; $V_{CE} = -3\text{V}$	750	18000	
$h_{FE-2}$	DC Current Gain	$I_C = -12\text{A}$ ; $V_{CE} = -3\text{V}$	100		
$C_{OB}$	Output Capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f_{test} = 0.1\text{MHz}$		500	pF