

**DESCRIPTION**

- Built-in Base-Emitter Shunt Resistors
- Low Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = 2.0V(\text{Max.})@I_C = 4.0A$
- Collector-Emitter Sustaining Voltage-  
 $V_{CEO(SUS)} = 60V(\text{Min})$
- Complement to type 2N6053

**APPLICATIONS**

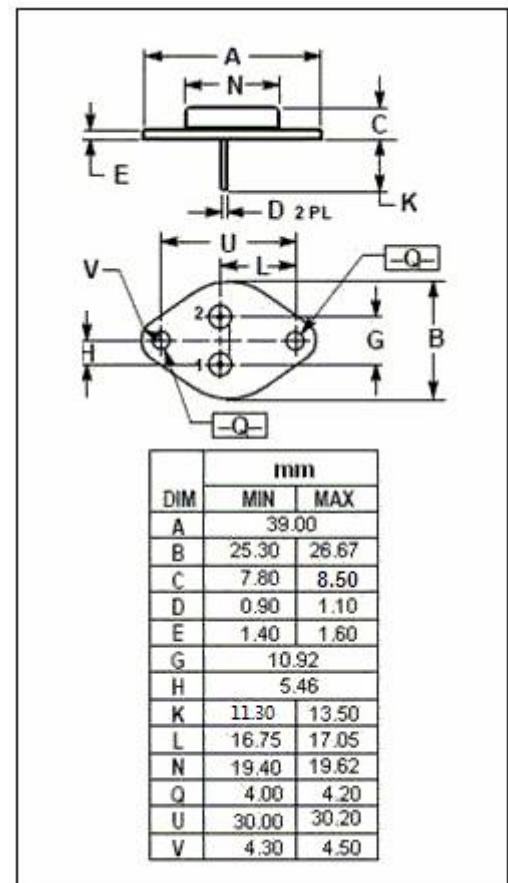
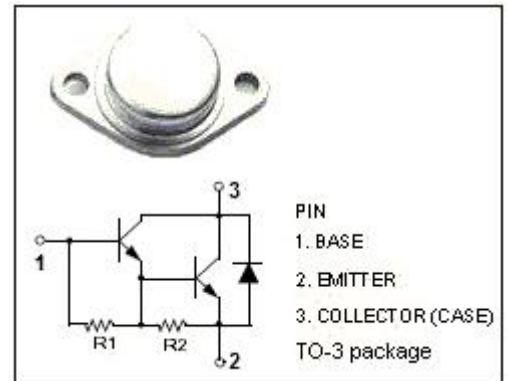
- Designed for general purpose amplifier and low frequency switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	8	A
$I_{CM}$	Collector Current-Peak	16	A
$I_B$	Base Current	120	mA
$P_C$	Collector Power Dissipation@ $T_C=25^\circ C$	100	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-65~150	$^\circ C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	1.75	$^\circ C/W$



**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE0(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 50\text{mA} ; I_B= 0$	60		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 4\text{A}; I_B= 16\text{mA}$		2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 80\text{mA}$		3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 80\text{mA}$		4.0	V
$V_{BE(on)}$	Base-Emitter On voltage	$I_C= 4\text{A} ; V_{CE}= 3\text{V}$		2.8	V
$I_{CEO}$	Collector Cutoff current	$V_{CE}= 30\text{V}; I_B= 0$		0.5	mA
$I_{CEX}$	Collector Cutoff current	$V_{CE}= 60\text{V}; V_{BE(off)}= -1.5\text{V}$ $V_{CE}= 60\text{V}; V_{BE(off)}= -1.5\text{V}, T_C=150^{\circ}\text{C}$		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	$I_C= 4\text{A} ; V_{CE}= 3\text{V}$	750	18000	
$h_{FE-2}$	DC Current Gain	$I_C= 8\text{A} ; V_{CE}= 3\text{V}$	100		
$C_{OB}$	Output Capacitance	$I_E=0 ; V_{CB}= 10\text{V}; f_{test}= 0.1\text{MHz}$		220	pF