

SavantIC Semiconductor

Product Specification

Silicon PNP Power Transistors

2N6475 2N6476

DESCRIPTION

- With TO-220 package
- Low collector saturation voltage
- Excellent safe operating area

APPLICATIONS

- General-purpose medium power for switching and amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6475	Open emitter	-110	V
		2N6476		-130	
V_{CEO}	Collector-emitter voltage	2N6475	Open base	-100	V
		2N6476		-120	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-4	A
I_B	Base current			-2	A
P_T	Total power dissipation		$T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature			150	$^\circ\text{C}$
T_{stg}	Storage temperature			-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	3.125	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	2N6475	I _C =-0.1A ; I _B =0	-100			V
		2N6476		-120			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-1.5A; I _B =-0.15A			-1.2	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-4A; I _B =-2A			-2.5	V
V _{BE-1}	Base-emitter on voltage		I _C =-1.5A ; V _{CE} =-4V			-2.0	V
V _{BE-2}	Base-emitter on voltage		I _C =-4A ; V _{CE} =-2.5V			-3.5	V
I _{CEX}	Collector cut-off current	2N6475	V _{CE} =-100V; V _{BE} =-1.5V T _C =100°C			-0.1 -2.0	mA
		2N6476	V _{CE} =-120V; V _{BE} =-1.5V T _C =100°C			-0.1 -2.0	
I _{CEO}	Collector cut-off current	2N6475	V _{CE} =-50V; I _B =0			-1.0	mA
		2N6476	V _{CE} =-60V; I _B =0				
I _{EBO}	Emitter cut-off current		V _{EB} =-5V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain		I _C =-1.5A ; V _{CE} =-4V	15		150	
h _{FE-2}	DC current gain		I _C =-4A ; V _{CE} =-2.5V	2			
C _{OB}	Output capacitance		I _E =0 ; V _{CB} =-10V; f=1MHz			250	pF
f _T	Transition frequency	2N6475	I _C =-0.5A ; V _{CE} =-4V	4			MHz
		2N6476		5			

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PACKAGE OUTLINE

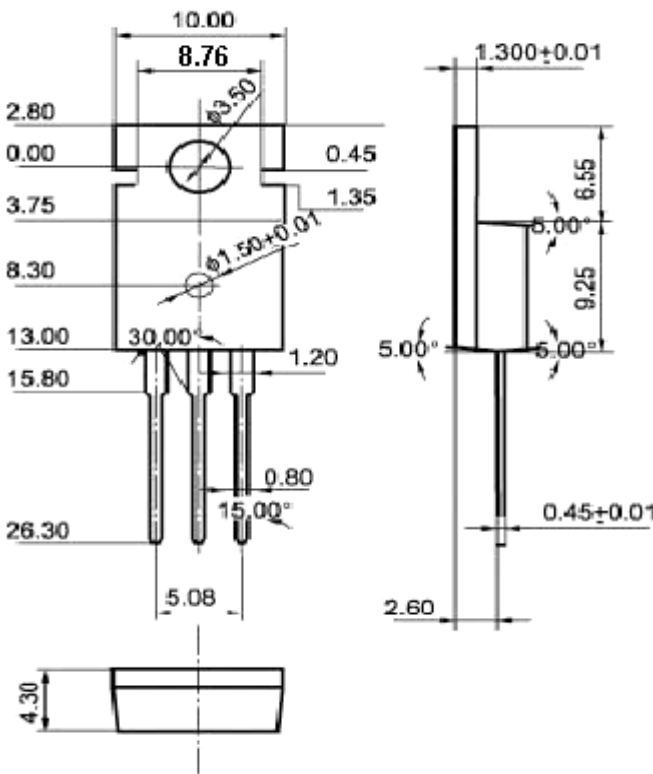


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)