

# 2SK3497

## High Power Amplifier Application

- High breakdown voltage :  $V_{DSS} = 180V$
- Complementary to 2SJ618

### Maximum Ratings ( $T_a = 25^\circ C$ )

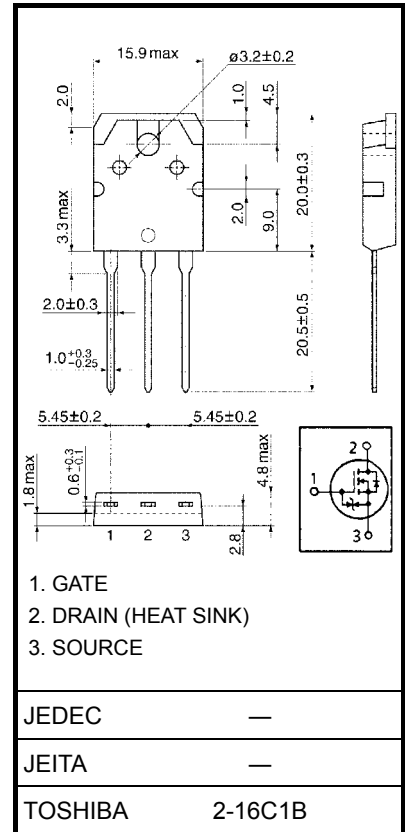
Characteristics	Symbol	Rating	Unit	
Drain-source voltage	$V_{DSS}$	180	V	
Gate-source voltage	$V_{GSS}$	$\pm 12$	V	
Drain current	DC (Note )	$I_D$	10	A
	Pulse (Note )	$I_{DP}$	30	A
Drain power dissipation ( $T_c = 25^\circ C$ )	$P_D$	130	W	
Channel temperature	$T_{ch}$	150	$^\circ C$	
Storage temperature range	$T_{stg}$	-55~150	$^\circ C$	

Note : Please use devices on condition that the channel temperature is below  $150^\circ C$ .

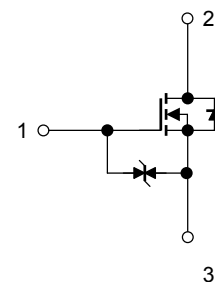
### Thermal Characteristics

Characteristics	Symbol	Max	Unit
Thermal resistance, channel to case	$R_{th(ch-c)}$	0.96	$^\circ C / W$
Thermal resistance, channel to ambient	$R_{th(ch-a)}$	50	$^\circ C / W$

Unit: mm



Weight: 4.6 g (typ.)



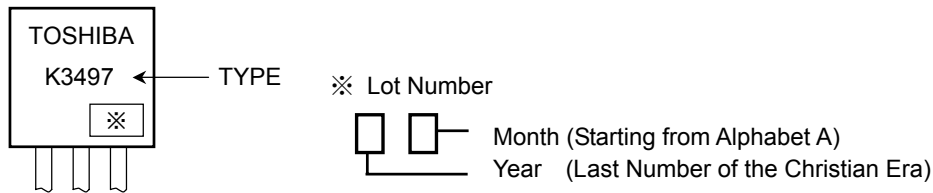
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## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Gate leakage current	$I_{GSS}$	$V_{GS} = \pm 12\text{ V}, V_{DS} = 0\text{ V}$	—	—	10	$\mu\text{A}$
Drain cut-off current	$I_{DSS}$	$V_{DS} = 180\text{ V}, V_{GS} = 0\text{ V}$	—	—	100	$\mu\text{A}$
Drain-source breakdown voltage	$V_{(BR)DSS}$	$I_D = 10\text{ mA}, V_{GS} = 0\text{ V}$	180	—	—	V
Gate threshold voltage	$V_{th}$	$V_{DS} = 10\text{ V}, I_D = 1\text{ mA}$	1.1	—	2.1	V
Drain-source saturation voltage	$V_{DS(ON)}$	$V_{GS} = 7\text{ V}, I_D = 5\text{ A}$	—	—	0.75	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10\text{ V}, I_D = 5\text{ A}$	6.0	12.0	—	S
Input capacitance	$C_{iss}$	$V_{DS} = 30\text{ V}, V_{GS} = 0\text{ V}, f = 1\text{ MHz}$	—	2400	—	pF
Reverse transfer capacitance	$C_{rss}$		—	220	—	
Output capacitance	$C_{oss}$		—	30	—	

This transistor is an electrostatic sensitive device. Please handle with caution.

## Marking



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