TOSHIBA Field Effect Transistor Silicon N Channel MOS Type (π-MOSV)

# 2SK3497

#### **High Power Amplifier Application**

Unit: mm

•	High breakdown volta	volume
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• Complementary to 2SJ618

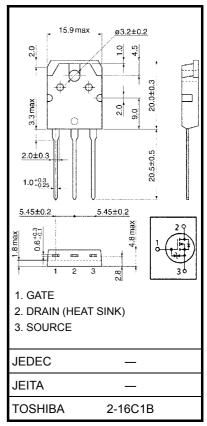
#### **Maximum Ratings (Ta = 25°C)**

Characteri	stics	Symbol	Rating	Unit	
Drain-source voltage		$V_{DSS}$	180	٧	
Gate-source voltage		$V_{GSS}$	±12	٧	
Drain current	DC (Note)	I <sub>D</sub>	10	Α	
Diain current	Pulse (Note )	$I_{DP}$	30	Α	
Drain power dissipation	n (Tc = 25°C)	$P_{D}$	130	W	
Channel temperature		T <sub>ch</sub>	150	°C	
Storage temperature ra	ange	T <sub>stg</sub>	-55~150	°C	

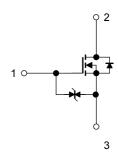
Note: Please use devices on condition that the channel temperature is below  $150^{\circ}\text{C}$ .

#### **Thermal Characteristics**

Characteristics	Symbol	Max	Unit
Thermal resistance, channel to case	R <sub>th (ch-c)</sub>	0.96	°C / W
Thermal resistance, channel to ambient	R <sub>th (ch-a)</sub>	50	°C / W



Weight: 4.6 g (typ.)



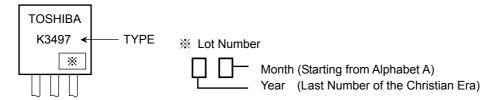


## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> = ±12 V, V <sub>DS</sub> = 0 V	_	_	10	μΑ
Drain cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> = 180V, V <sub>GS</sub> = 0 V	_	_	100	μA
Drain-source breakdown voltage	V (BR) DSS	I <sub>D</sub> = 10 mA, V <sub>GS</sub> = 0 V	180	_	-	V
Gate threshold voltage	$V_{th}$	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 1 mA	1.1	_	2.1	V
Drain-source saturation voltage	V <sub>DS</sub> (ON)	V <sub>GS</sub> = 7 V, I <sub>D</sub> = 5 A	_	_	0.75	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 5 A	6.0	12.0	_	S
Input capacitance	C <sub>iss</sub>		_	2400	_	
Reverse transfer capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 30 V, V <sub>GS</sub> = 0 V, f = 1 MHz	_	220	_	pF
Output capacitance	Coss		_	30	_	

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

### Marking



2 2003-07-16

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