TOSHIBA

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

2SK3497

High Power Amplifier Application

- High breakdown voltage: VDSS = 180V
- Complementary to 2SJ618

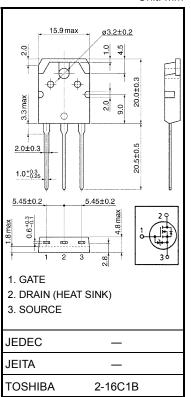
Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit	
Drain-source voltage		V _{DSS}	180	V	
Gate-source voltage		V _{GSS}	±12	V	
Drain current	DC (Note)	I _D	10	A	
	Pulse (Note)	I _{DP}	30	А	
Drain power dissipation (Tc = 25°C)		PD	130	W	
Channel temperature		T _{ch}	150	°C	
Storage temperature range		T _{stg}	-55~150	°C	

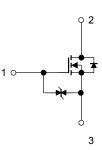
Note: Ensure that the channel temperature does not exceed 150°C.

Thermal Characteristics

Characteristics	Symbol	Max	Unit	
Thermal resistance, channel to case	R _{th (ch−c)}	0.96	°C / W	
Thermal resistance, channel to ambient	R _{th (ch−a)}	50	°C / W	



Weight: 4.6 g (typ.)



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Unit: mm

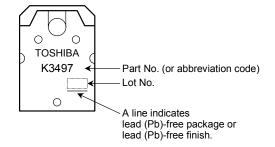
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Electrical Characteristics (Ta = 25°C)

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

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

Marking





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