

2SK1358

Field Effect Transistor

Silicon N Channel MOS Type (π -MOS II.5)

High Speed, High Current DC-DC Converter,
Relay Drive and Motor Drive Applications

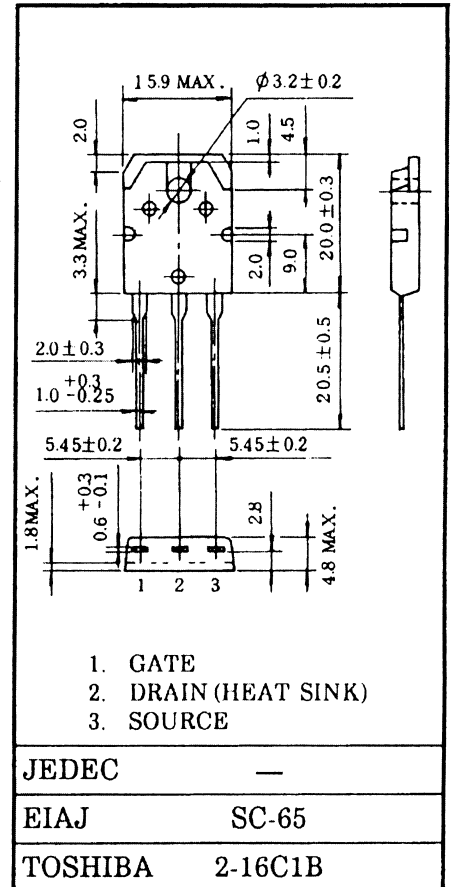
Features

- Low Drain-Source ON Resistance
- $R_{DS(ON)} = 1.1\Omega$ (Typ.)
- High Forward Transfer Admittance
- $|Y_{fs}| = 4.0S$ (Typ.)
- Low Leakage Current
- $I_{DSS} = 300\mu A$ (Max.) @ $V_{DS} = 720V$
- Enhancement-Mode
- $V_{th} = 1.5 \sim 3.5V$ @ $V_{DS} = 10V, I_D = 1mA$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	900	V
Drain-Gate Voltage ($R_{GS} = 20k\Omega$)	V_{DGR}	900	V
Gate-Source Voltage	V_{GSS}	± 30	V
Drain Current	DC	I_D	9
	Pulse	I_{DP}	27
Drain Power Dissipation ($T_c = 25^\circ C$)	P_D	150	W
Channel Temperature	T_{ch}	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$

Industrial Applications Unit in mm



1. GATE
2. DRAIN (HEAT SINK)
3. SOURCE

JEDEC —

EIAJ SC-65

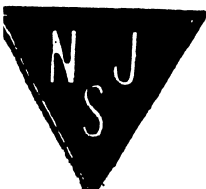
TOSHIBA 2-16C1B

Weight : 4.6g

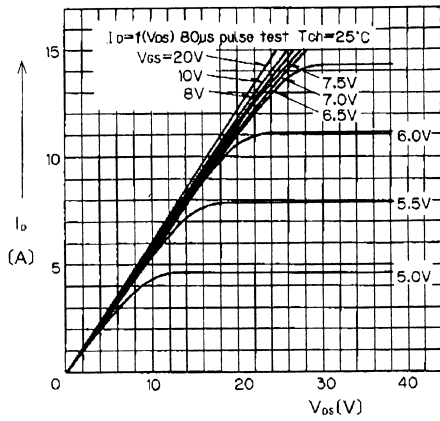
Thermal Characteristics

CHARACTERISTIC	SYMBOL	MAX.	UNIT
Thermal Resistance, Channel to Case	$R_{th(ch-c)}$	0.833	$^\circ C/W$
Thermal Resistance, Channel to Ambient	$R_{th(ch-a)}$	50	$^\circ C/W$

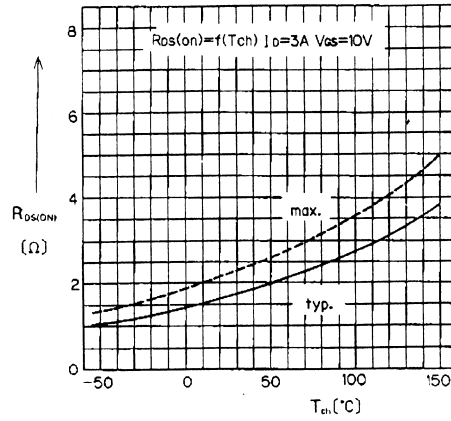
This transistor is an electrostatic sensitive device. Please handle with care.



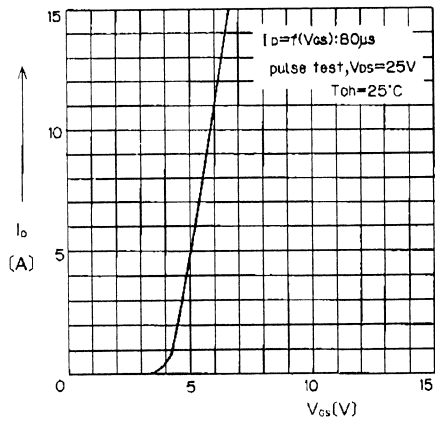
■ Characteristics



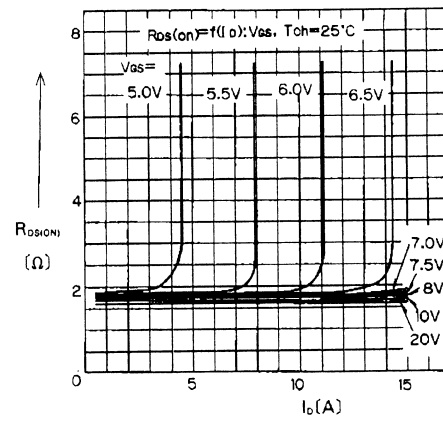
Typical Output Characteristics



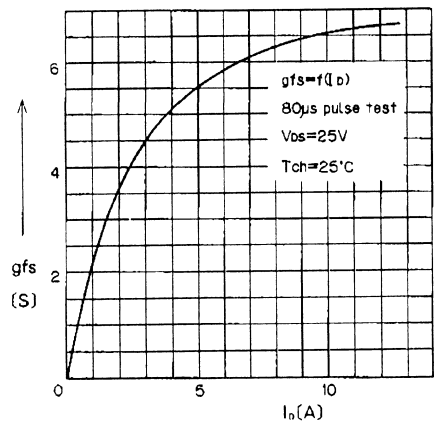
On State Resistance vs. T_{ch}



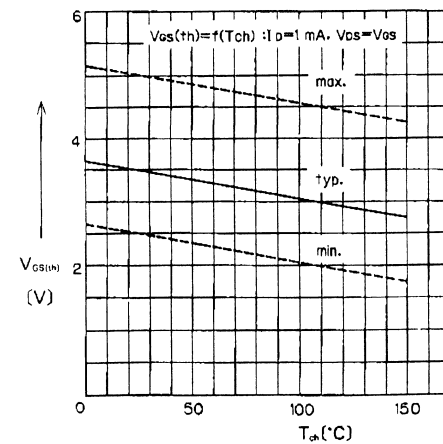
Typical Transfer Characteristics



Typical Drain-Source on State Resistance vs. I_D



順伝達コンダクタンスドレイン電流(標準値)



Gate Threshold Voltage vs. T_{ch}