

2SK1358

**Field Effect Transistor**

**Silicon N Channel MOS Type ( $\pi$ -MOS II.5)**

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

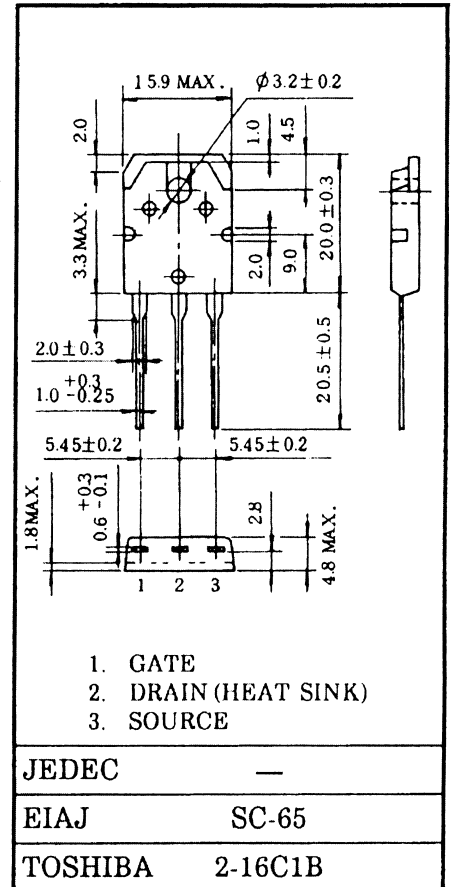
**Features**

- 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	$V_{GSS}$	$\pm 30$	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



Weight : 4.6g

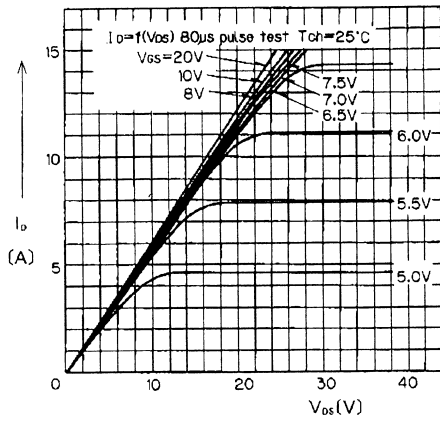
**Thermal Characteristics**

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	$^\circ C/W$

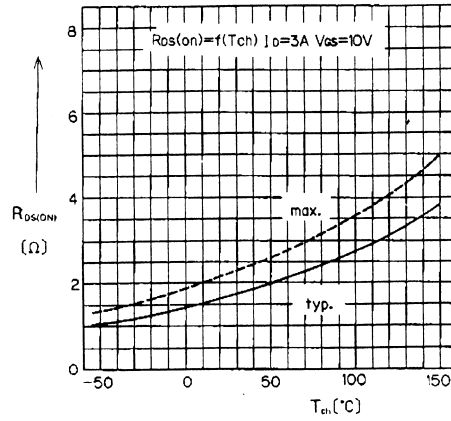
This transistor is an electrostatic sensitive device. Please handle with care.



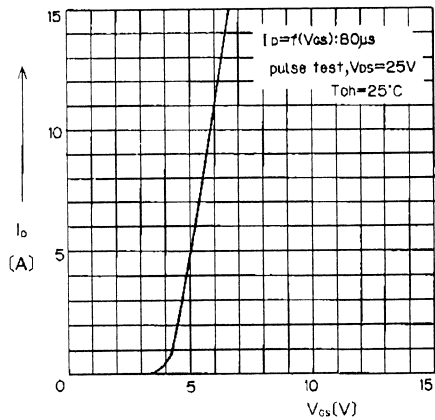
## ■ Characteristics



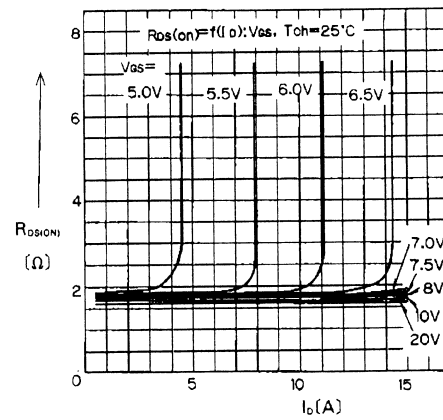
Typical Output Characteristics



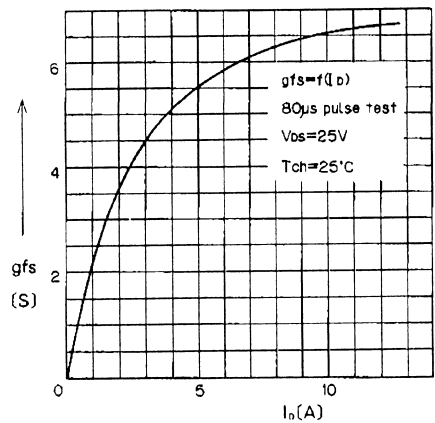
On State Resistance vs.  $T_{ch}$



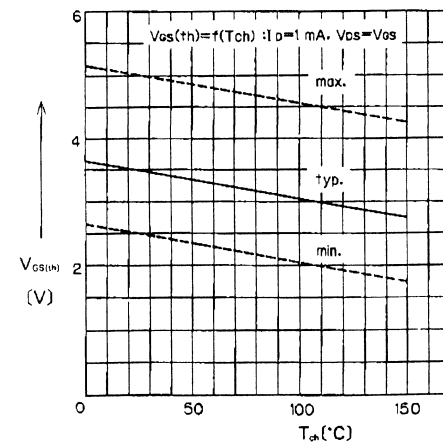
Typical Transfer Characteristics



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.  $T_{ch}$