

■ Features

- High Voltage (900V)
- Low Saturation Voltage
- Voltage Drive

■ Applications

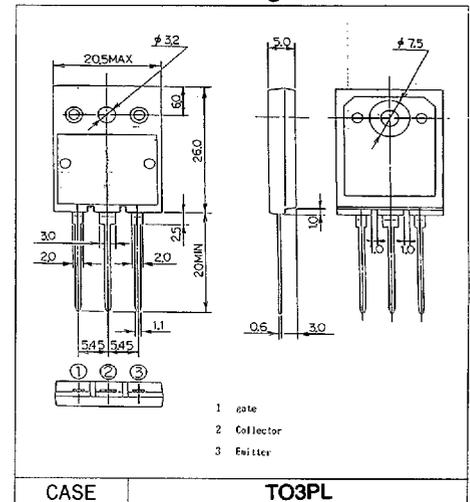
- Resonant Mode
- Microwave Ovens
- Power Supply
- Shunt Regulator

■ Maximum Ratings and Characteristics

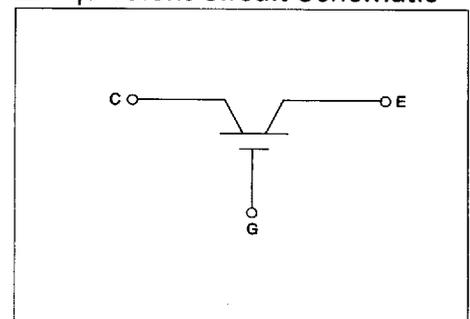
● Absolute Maximum Ratings

Items	Symbols	Ratings	Units
Collector-Emitter Voltage	V_{CES}	900	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	Continuous	I_C	50
	1ms	$I_{C\ pulse}$	150
Max. Power Dissipation	P_C	200	W
Operating Temperature	T_j	+150	°C
Storage Temperature	T_{stg}	-40 to +125	°C

■ Outline Drawings



■ Equivalent Circuit Schematic



● Electrical Characteristics ($T_c=25^\circ\text{C}$)

Items	Symbols	Test Conditions	Min.	Typ.	Max.	Units
Collector Cutoff Current	I_{CES}	$V_{GE}=0V$ $V_{CE}=800V$			100	μA
Gate-Leakage Current	I_{GES}	$V_{CE}=0V$ $V_{GE}=20V$			100	nA
Threshold Voltage	$V_{GE(th)}$	$V_{CE}=10V$ $I_C=10\text{ mA}$	2.0		6.0	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$V_{GE}=15V$ $I_C=50A$			3.6	V
Input Capacitance	C_{ies}	$V_{CE}=25V$, $V_{GE}=0V$		2400		pF
Switching Characteristics	t_f	$I_C=50A$, $V_{GE}=+15V$ See Fig. 2			0.85	μs

*3 Resistive load

*4 Inductive load

● Thermal Characteristics

Items	Symbols	Test Conditions	Min.	Typ.	Max.	Units
Thermal Resistance	$R_{th(j-c)}$	Junction Case			0.625	°C/W