

TOSHIBA ZENER DIODE SILICON DIFFUSED JUNCTION

# 5Z27, 5Z30

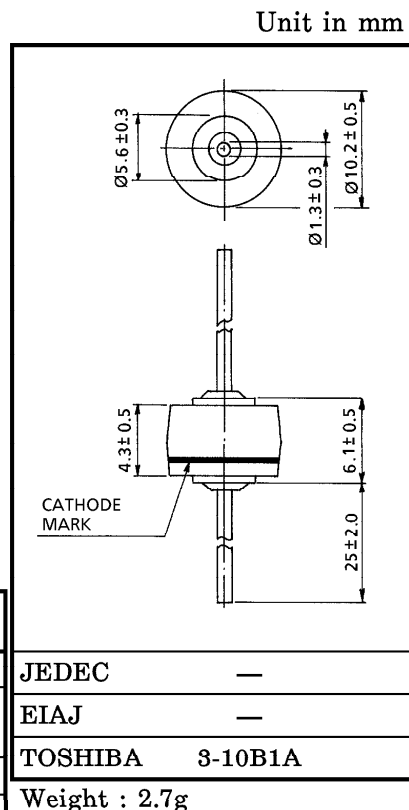
**POWER SURGE SUPPRESSOR**

--- designed for use as a reverse power transient suppressor to protect automotive electrical equipments from over-voltage conditions.

- Excellent Clamp Voltage Characteristics
- High Power Capability
- Rapidly Surge Absorption
- Excellent Surge Responsibility
- Various Lead Types
- Non-Standard Voltage Available

**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Allowable Power Dissipation (Note 1)	P	5	W
Non-Repetitive Peak Reverse Surge Current (Ta = 25°C) (Fig.1)	$I_{RSM}$	62	A
Junction Temperature	$T_j$	-40~150	°C
Storage Temperature	$T_{stg}$	-40~150	°C



(Note 1) Lead tip temperature  
 $T_L = 25^\circ\text{C}$

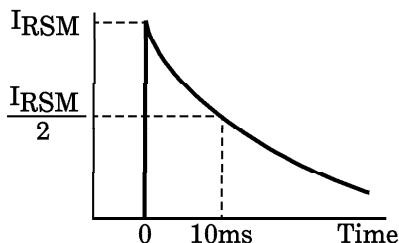


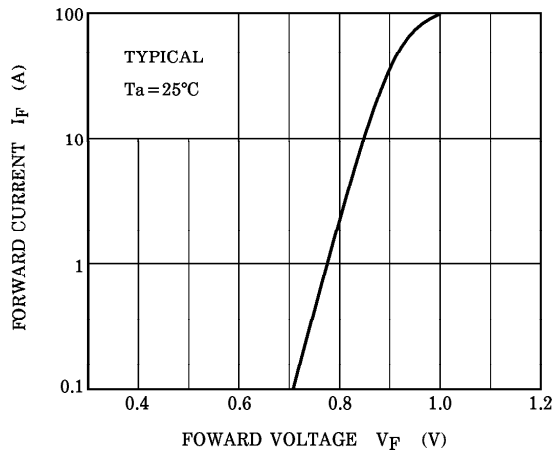
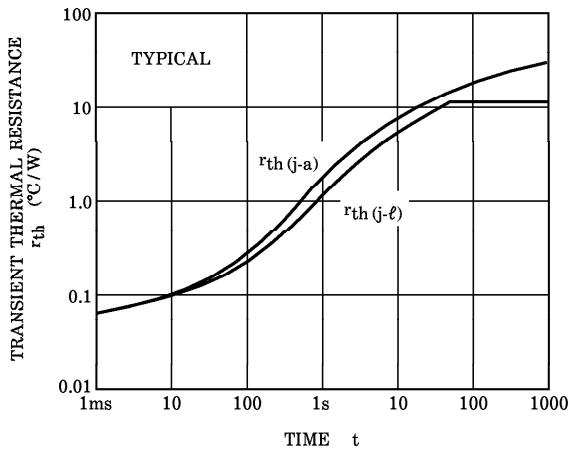
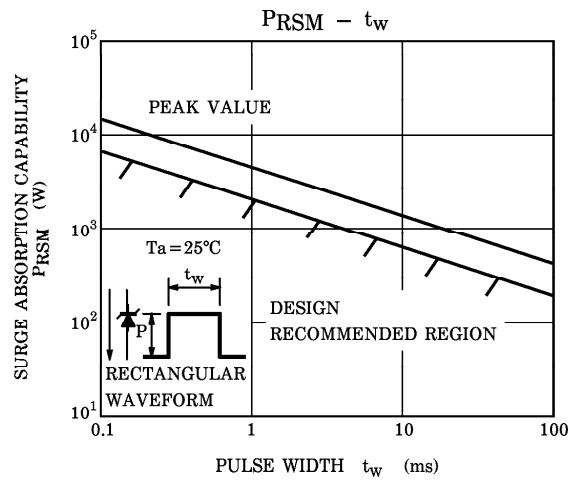
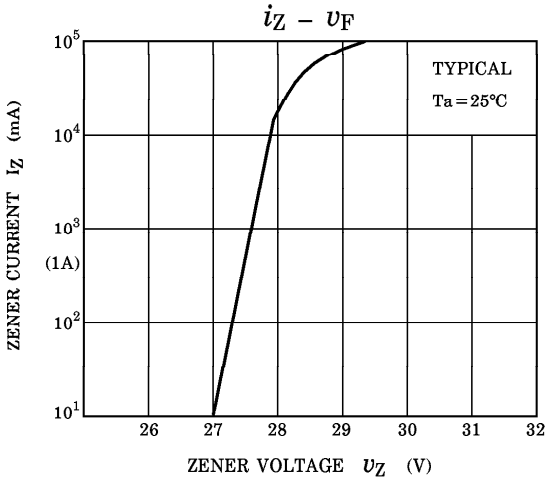
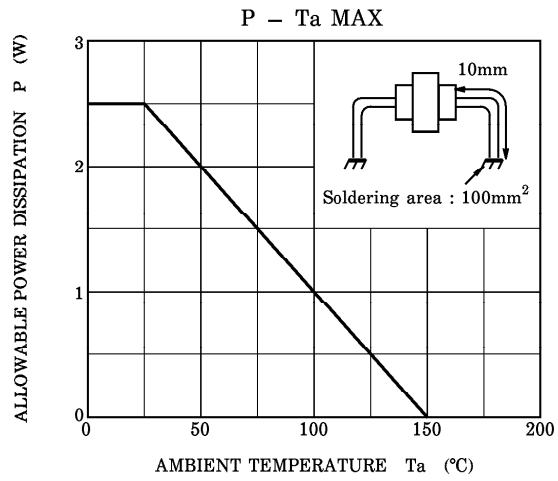
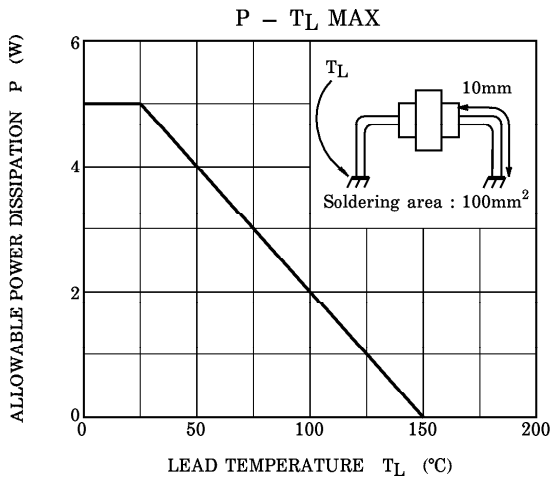
Fig.1

**ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

TYPE	ZENER VOLTAGE $V_Z$ (V) ( $I_Z = 10\text{mA}$ )			ZENER IMPEDANCE $r_d$ ( $\Omega$ ) ( $I_Z = 10\text{mA}$ )	TEMPERATURE COEFFICIENT $\alpha_T$ (mV / °C) ( $I_Z = 10\text{mA}$ )		FORWARD VOLTAGE $V_F$ (V) ( $I_F = 6\text{A}$ )	REVERSE CURRENT $I_R$ ( $\mu\text{A}$ ) ( $V_R = 22\text{V}$ )
	MIN.	TYP.	MAX.	MAX.	TYP.	MAX.	MAX.	MAX.
5Z27	24	27	30	30	23	36	1.2	10
5Z30	27	30	33	30	25	40	1.2	10

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