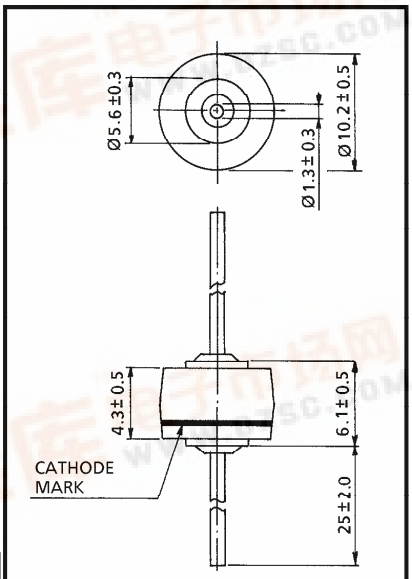
TOSHIBA ZENER DIODE SILICON DIFFUSED JUNCTION

5Z27, 5Z30

POWER SURGE SUPPRESSOR

Unit in mm

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



JEDEC	—
EIAJ	—
TOSHIBA	3-10B1A

Weight : 2.7g

- 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 $T_L = 25°C$

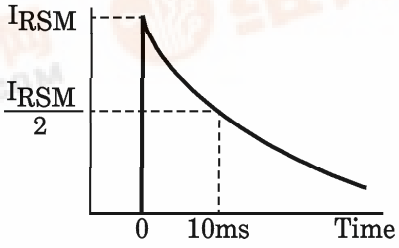


Fig.1

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

TYPE	ZENER VOLTAGE V_Z (V) (I_Z = 10mA)			ZENER IMPEDANCE r_d (Ω) (I_Z = 10mA)	TEMPERATURE COEFFICIENT α_T (mV/°C) (I_Z = 10mA)		FORWARD VOLTAGE V_F (V) (I_F = 6A)	REVERSE CURRENT I_R (μA) (V_R = 22V)
	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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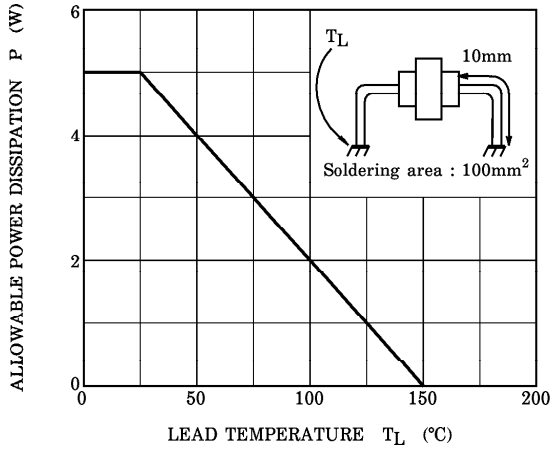
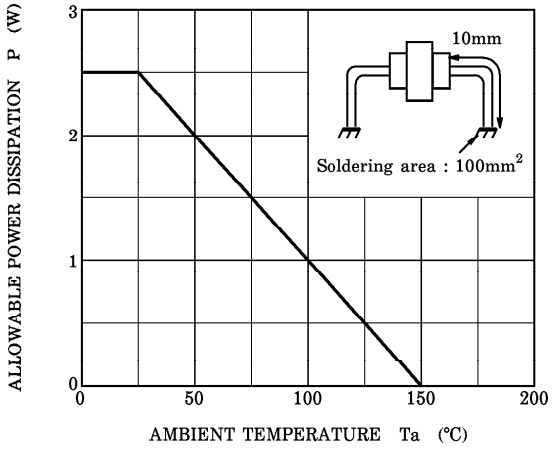
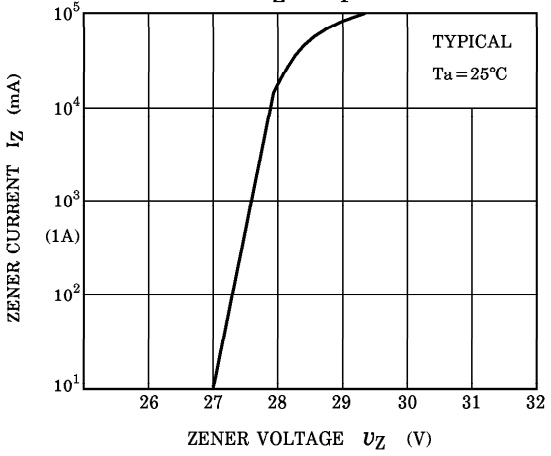
P – T_L MAX



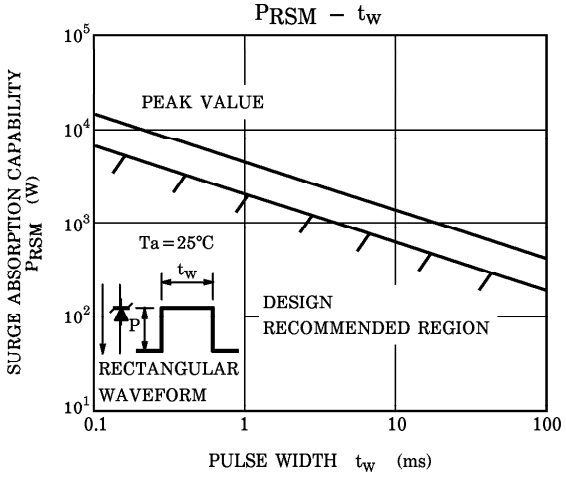
P – Ta MAX

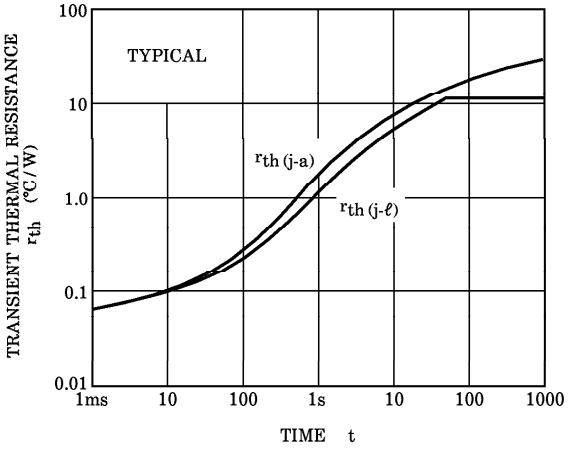


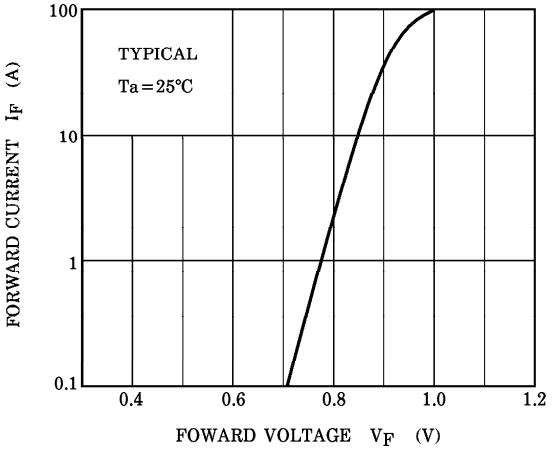
i_Z – v_F



P_{RSM} – t_w







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