

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
 $T_L=25^\circ\text{C}$

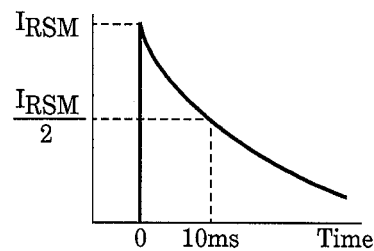
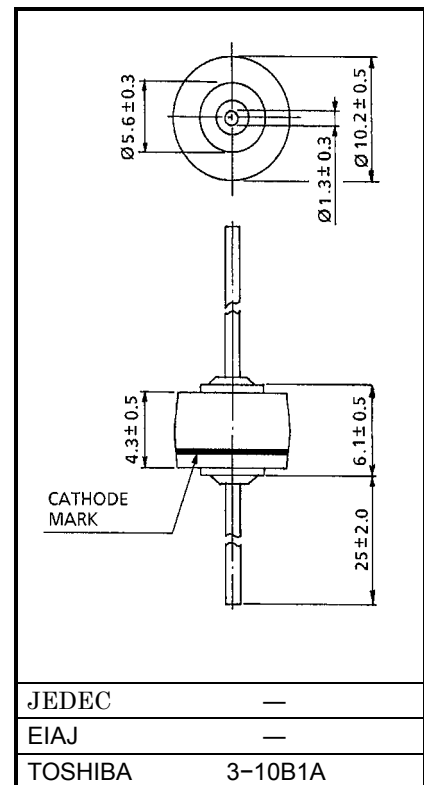


Fig.1

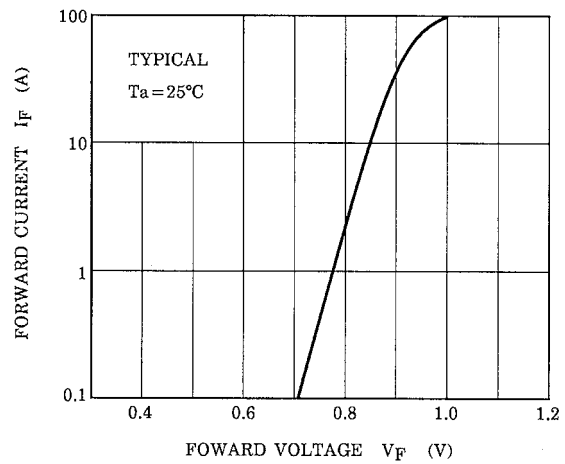
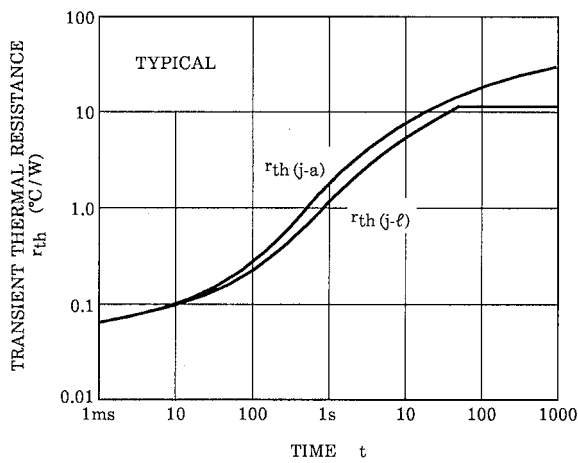
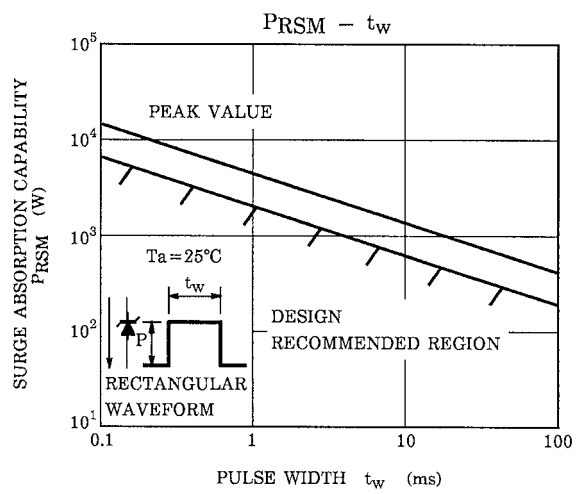
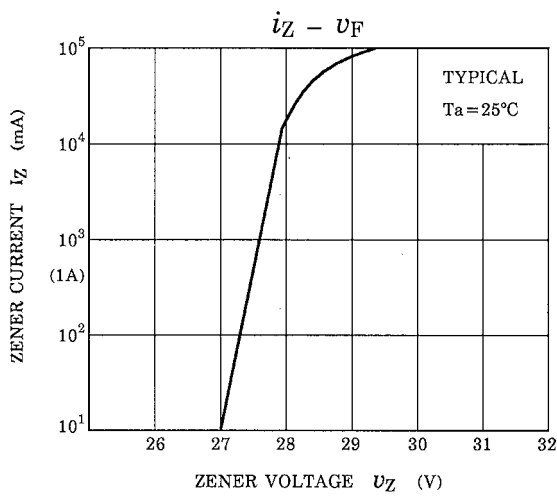
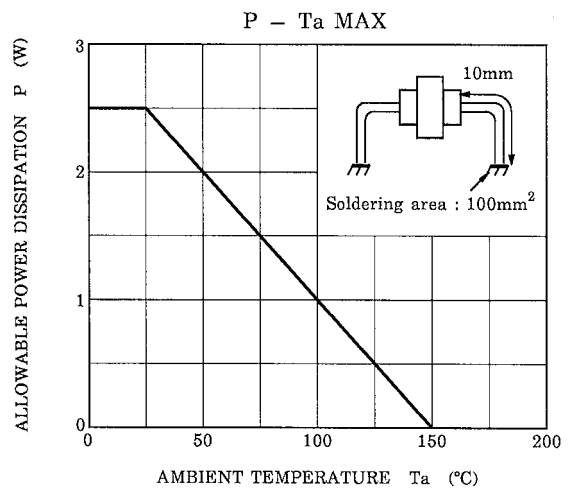
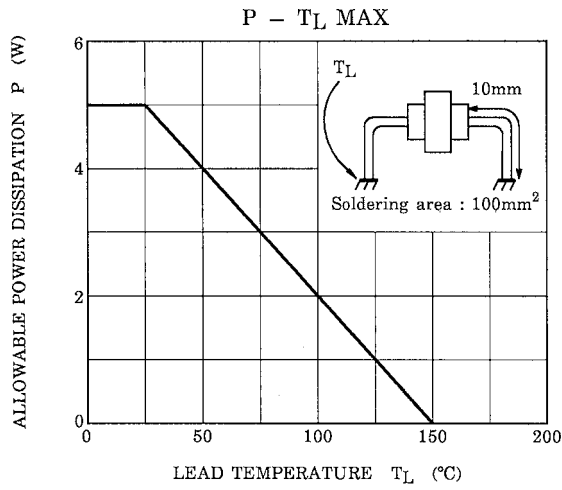
ELECTRICAL CHARACTERISTICS (Ta=25°C)

TYPE	ZENER VOLTAGE V_Z (V) ($I_Z=10\text{mA}$)			ZENER IMPEDANCE r_d (Ω) ($I_Z=10\text{mA}$)	TEMPERATURE COEFFICIENT α_T (mV / °C) ($I_Z=10\text{mA}$)		FORWARD VOLTAGE V_F (V) ($I_F=6\text{A}$)	REVERSE CURRENT I_R (μA) ($V_R=22\text{V}$)
	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

Unit: mm



Weight: 2.7 g



RESTRICTIONS ON PRODUCT USE

000707EAA

- TOSHIBA is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or damage to property.
In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent TOSHIBA products specifications. Also, please keep in mind the precautions and conditions set forth in the "Handling Guide for Semiconductor Devices," or "TOSHIBA Semiconductor Reliability Handbook" etc..
- The TOSHIBA products listed in this document are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.). These TOSHIBA products are neither intended nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury ("Unintended Usage"). Unintended Usage include atomic energy control instruments, airplane or spaceship instruments, transportation instruments, traffic signal instruments, combustion control instruments, medical instruments, all types of safety devices, etc.. Unintended Usage of TOSHIBA products listed in this document shall be made at the customer's own risk.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.