TOSHIBA ZENER DIODE SILICON DIFFUSED-JUNCTION TYPE

U5ZA27(Z), U5ZA27C

BEST SUITED FOR OVERVOLTAGE PROTECTION OF ELECTRONIC SYSTEM :

ELECTRONIC SYSTEM FOR USE IN AUTOMOBILES

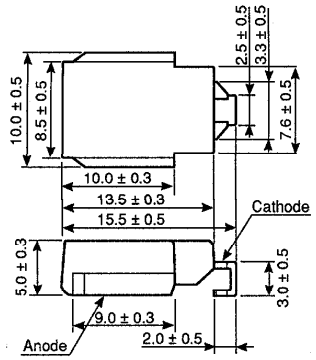
ELECTRONIC SYSTEM FOR COMMERCIAL USE

ELECTRONIC SYSTEM FOR INDUSTRIAL USE

FOR COMMUNICATIONS, CONTROLS, MEASURING INSTRUMENTS, ETC.

- High surge power withstanding capabilities that absorb load dump surge.
- Excellent surge responsibility for steep surge absorption.
- Surface mount type is available for easy applications. Axial lead type is also available.
- Corresponds to taping packages.

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	3-11J2A

Weight : 2.5 g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Allowable power dissipation (Note 1)	P	5	W
Non-repetitive peak reverse surge current (See Fig.1 for the exponents.)	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

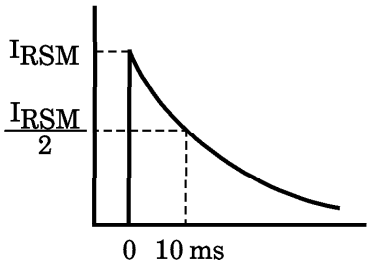


Fig.1

ELECTRICAL CHARACTERISTICS

Type No.	Zener voltage V_Z [V] (I_Z = 10 mA)			Operating resistance r_d [Ω] (I_Z = 10 mA)	Temperature coefficient α_T [mV / °C] (I_Z = 10 mA)		Forward voltage V_F [V] (I_F = 6 A)	Reverse current I_R [μA] (V_R = 22 V)
	Min.	Typ.	Max.	Max.	Typ.	Max.	Max.	Max.
U5ZA27(Z) / C	24.0	27	30.0	30	23	36	1.2	10

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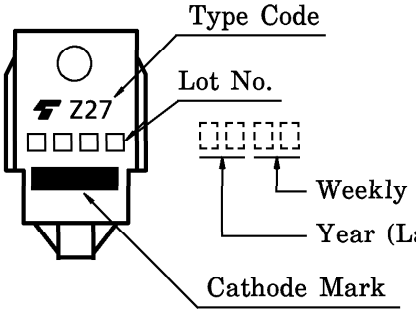
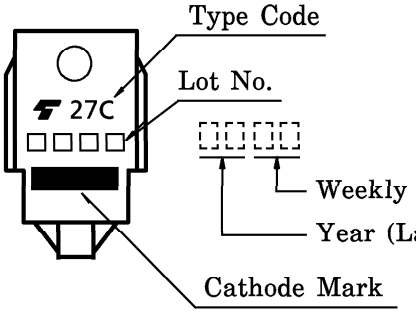
MARKING

U5ZA27 (Z)



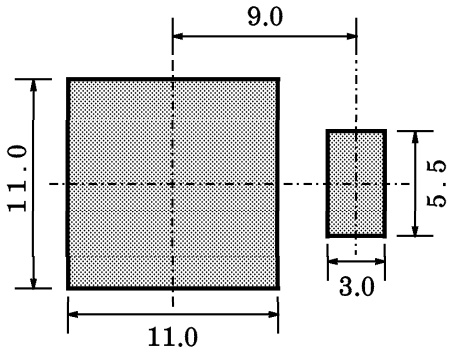
CODE	TYPE
Z27	U5ZA27 (Z)

U5ZA27C

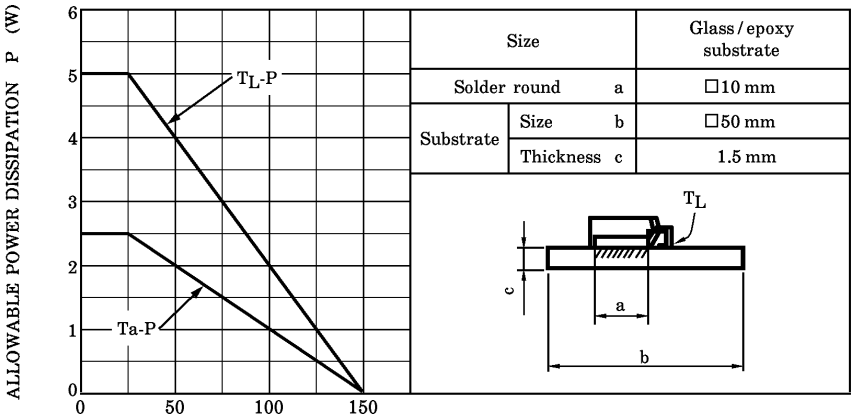


CODE	TYPE
27C	U5ZA27C

STANDARD SOLDERING PAD Unit : mm

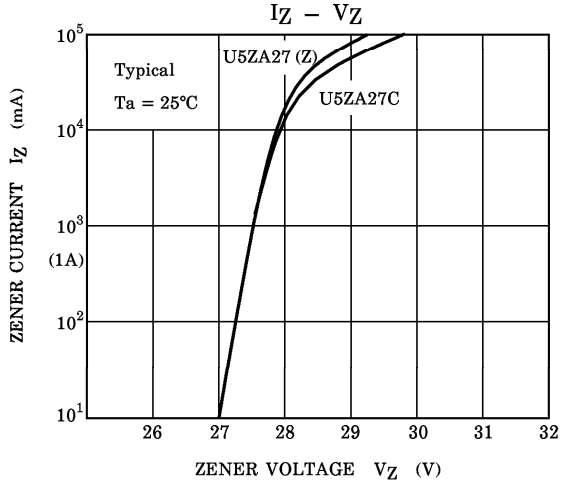


$P - T_L$, Ta



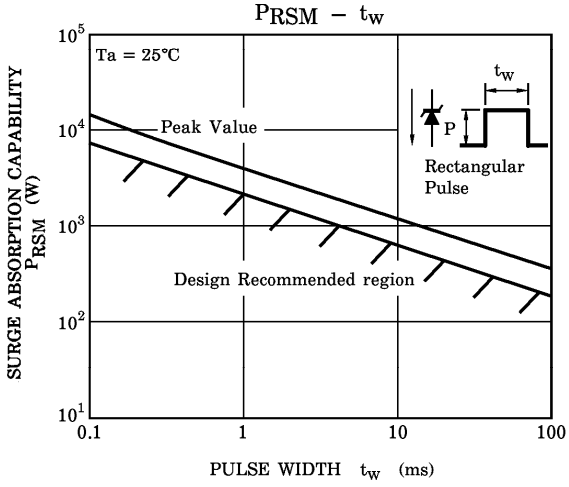
LEAD TEMPERATURE T_L, AMBIENT TEMPERATURE Ta (°C)

$I_Z - V_Z$



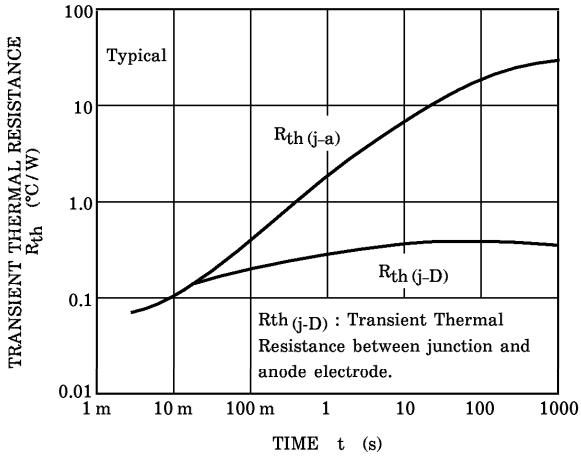
ZENER VOLTAGE V_Z (V)

$P_{RSM} - t_w$



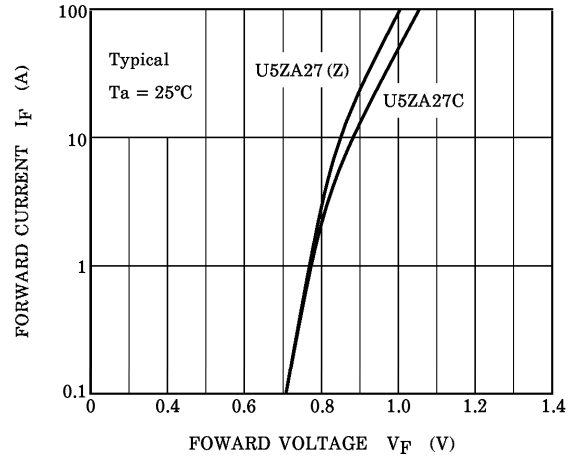
PULSE WIDTH t_w (ms)

$R_{th} - t$



TIME t (s)

$I_F - V_F$



FOWARD VOLTAGE V_F (V)