

200mA, 35V Schottky Barrier Diode

FEATURES

- Designed for mounting on small surface
- Extremely thin/leadless package
- Low capacitance
- Low forward voltage drop
- RoHS Compliant
- Halogen-free

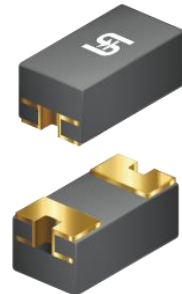
APPLICATIONS

- Adapters
- For switching power supply
- Low stored charge
- Inverter

MECHANICAL DATA

- Case: 0603-B
- Terminal: Gold plated, solderable per MIL-STD-750 method 2026
- Polarity: Indicated by cathode band
- Weight: 3.0mg (approximately)

KEY PARAMETERS		
PARAMETER	VALUE	UNIT
I_F	200	mA
V_{RRM}	35	V
I_{FSM}	1	A
$T_{J\ MAX}$	125	°C
Package	0603-B	



0603-B



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Marking code on the device		BA	
Peak reverse voltage	V_{RRM}	35	V
Reverse voltage	V_R	30	V
Forward current	I_F	200	mA
Non-repetitive peak forward surge current 8.3 ms single half sinewave superimposed on rate load	I_{FSM}	1	A
Junction temperature range	T_J	-40 to +125	°C
Storage temperature range	T_{STG}	-40 to +125	°C

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage ⁽¹⁾	$I_F = 200\text{mA}$, $T_J = 25^\circ\text{C}$	V_F	-	0.5	V
Reverse current @ V_R ⁽²⁾	$V_R = 10\text{V}$, $T_J = 25^\circ\text{C}$	I_R	-	30	μA

Notes:

1. Pulse test with $PW = 0.3\text{ms}$
2. Pulse test with $PW = 30\text{ms}$

ORDERING INFORMATION

ORDERING CODE	PACKAGE	PACKING
TSS0230LU RGG	0603-B	4,000 / 7" Tape & Reel

CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Current Derating Ccurve

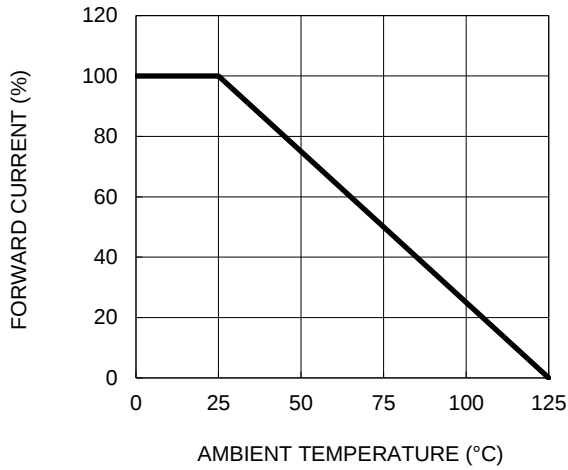


Fig.2 Typical Junction Capacitance

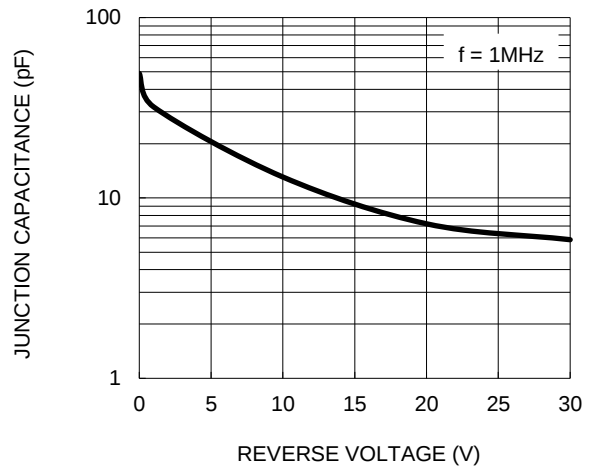


Fig.3 Typical Forward Characteristics

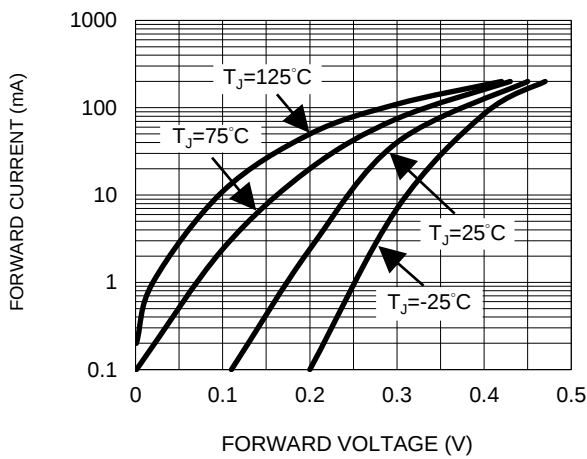


Fig.4 Typical Reverse Characteristics

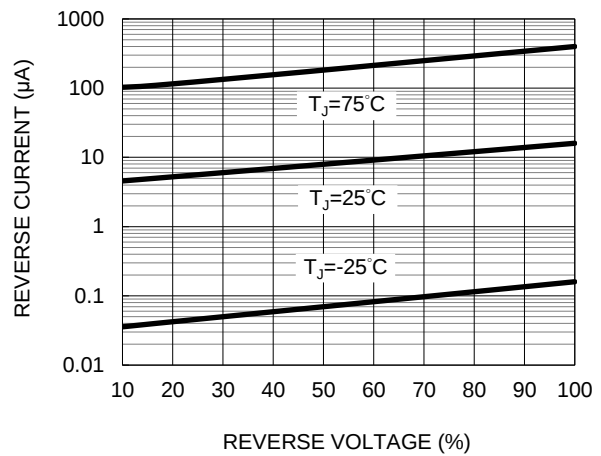


Fig.5 V_F Dispersion Map

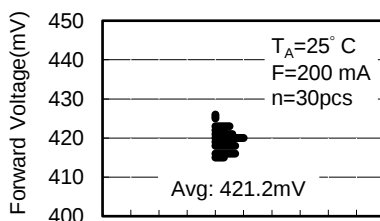


Fig.6 I_R Dispersion Map

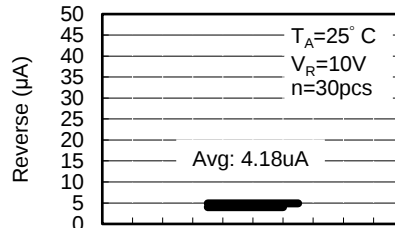
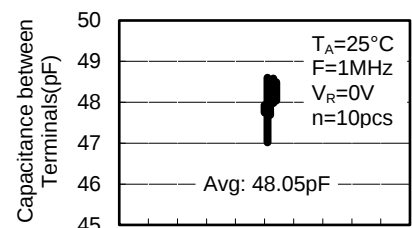
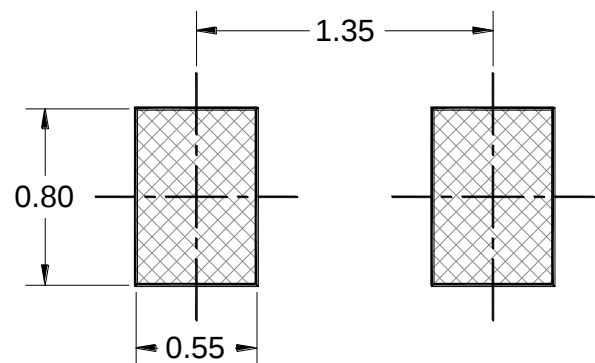
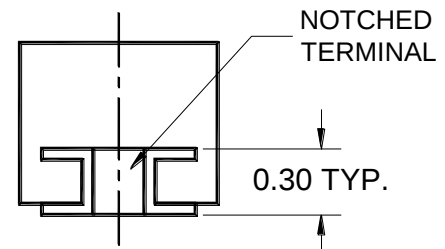
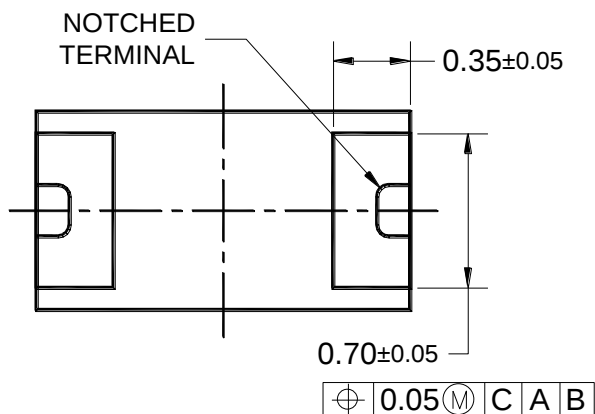
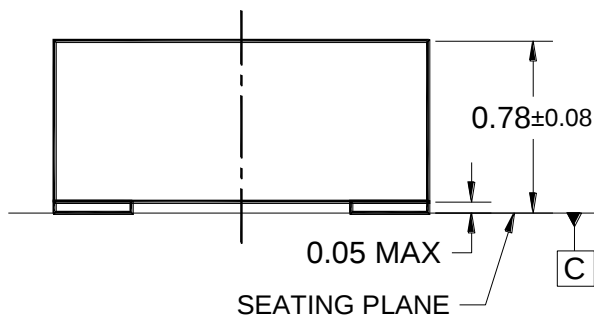
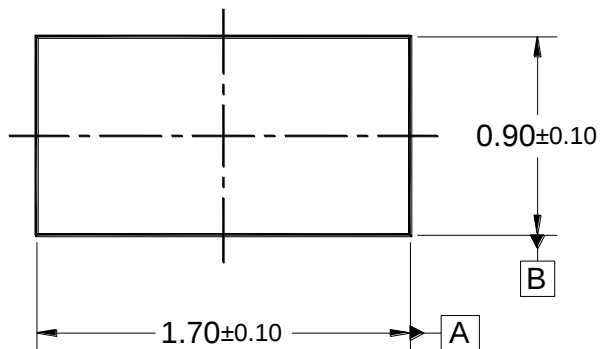


Fig.7 C_T Dispersion Map

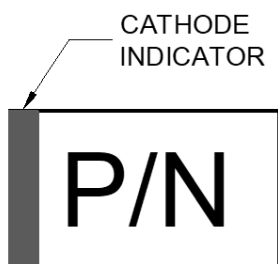


PACKAGE OUTLINE DIMENSIONS

0603-B



SUGGESTED PAD LAYOUT



MARKING DIAGRAM

P/N = MARKING CODE

NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3. PACKAGE SIZE CODE REFERENCE:
EIA (inch) NAME: 0603 (0.063in x 0.031in)
IEC (metric) NAME: 1608 (1.6mm x 0.8mm)
4. DWG NO. REF: HQ2SD07-0603B-041 REV A.

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