



SURFACE MOUNT SCHOTTKY BARRIER DIODE

BAS40 / -04 / -05 / -06

VOLTAGE RANGE
CURRENT

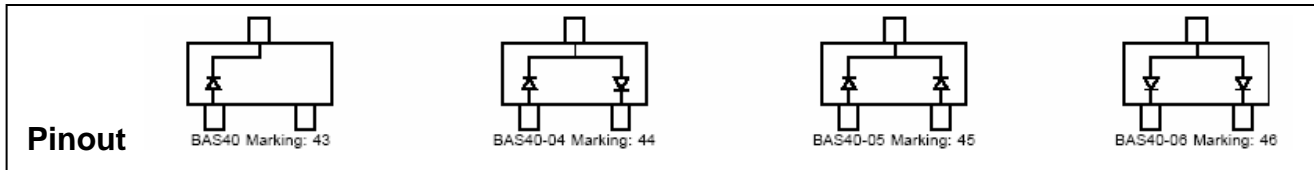
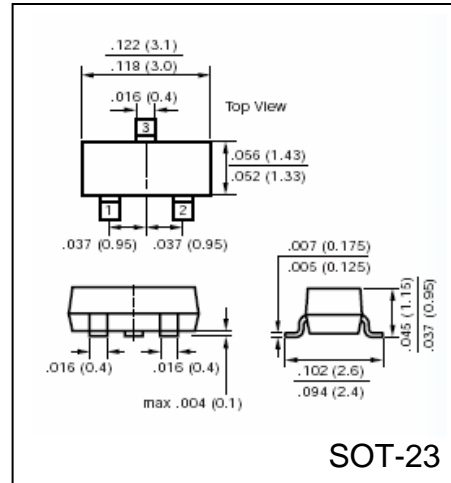
40 Volts
200 mA

FEATURES

- Fast Switching speed
- Low turn on Voltage
- Guard ring for transient and ESD protection

MECHANICAL DATA

- Case: Transfer molded plastic, SOT-23
- Terminals: solderable per MIL-STD-202 Method 208
- Pinout: See diagram
- Weight: 0.00028 ounce, 0.008gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS		UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	Volts
Forward Continuous Current @ $T_A = 25^\circ\text{C}$ (Note 1)	I_F	200	mA
Non-repetitive Peak Forward Surge Current @ $T_p \leq 1$ Sec	I_{FSM}	600	mA
Minimum Reverse Breakdown Voltage, $I_R = 10\mu\text{A}$	V_{BRR}	40	Volts
Maximum Forward Voltage @ 1.0mA 40mA	V_F	380 1000	mV
Maximum Leakage Current, $T_r < 300\mu\text{S}$, $V_R = 30\text{V}$	I_R	200	nA
Maximum Reverse Recovery Time $I_F = 10\text{mA}$, $I_R = 10\text{mA}$, $I_{RR} = 1\text{mA}$, $R_L = 100\Omega$	t_{rr}	5	nS
Power dissipation (Note 1)	P_{TOT}	350	mW
Typical Junction Capacitance, $V_F = 1\text{V}$, $f = 1\text{MHz}$	C_J	5	pF
Typical Thermal Resistance	$R_{\theta JA}$	355	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	(-55 to +125)	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)	$^\circ\text{C}$

Notes:

1. Provided terminals are kept at ambient temperature