

## Surface Mount Schottky Barrier Diodes

### BAT54TW/ADW/CDW/SDW/BRW

#### FEATURES

- Low forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN Junction guard ring for transient and ESD protection.
- Available in lead free version.

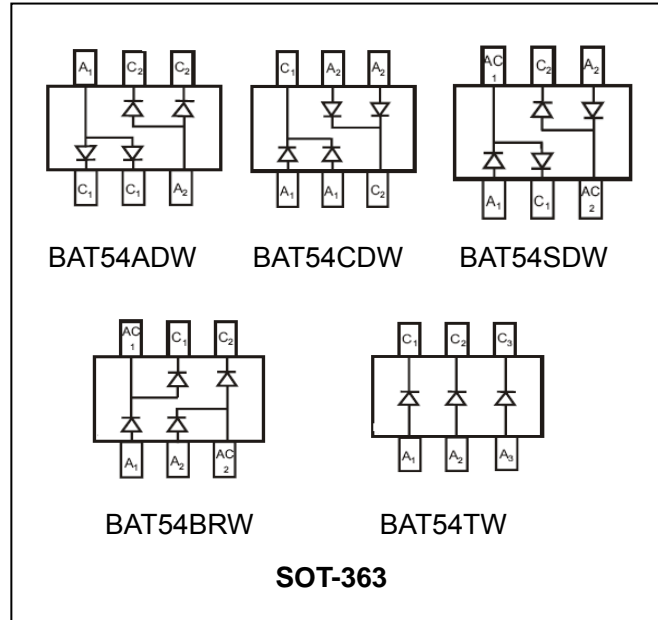


Lead-free

#### APPLICATIONS

- High speed switching application.

#### ORDERING INFORMATION



Type No.	Marking	Package Code
BAT54TW	KLA	SOT-363
BAT54ADW	KL6	SOT-363
BAT54CDW	KL7	SOT-363
BAT54SDW	KL8	SOT-363
BAT54BRW	KLB	SOT-363

#### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Characteristic	Value	Unit
$V_{RRM}$ $V_{RWM}$ $V_R$	Repetitive peak reverse Voltage Working peak reverse voltage DC reverse voltage	30	V
$I_F$	Forward continuous current	200	mA
$I_{FRM}$	Repetitive peak forward current	300	mA
$I_{FSM}$	Forward surge current @t<1.0s	0.6	A
$P_D$	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal resistance, Junction to ambient air	625	°C/W
$T_j, T_{stg}$	Operating and Storage Temperature	-65 to +125	°C

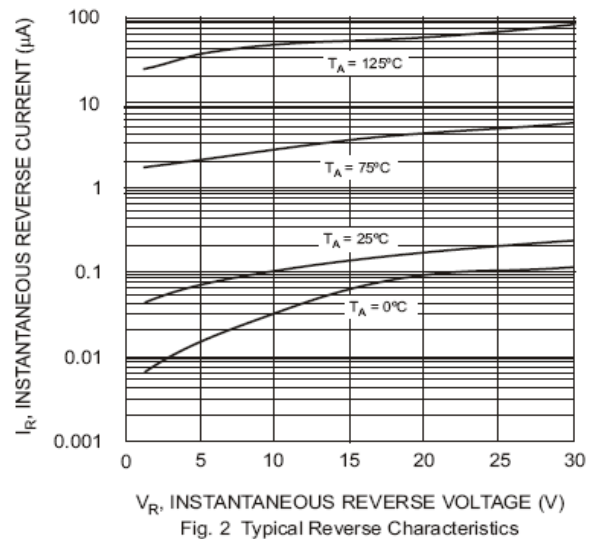
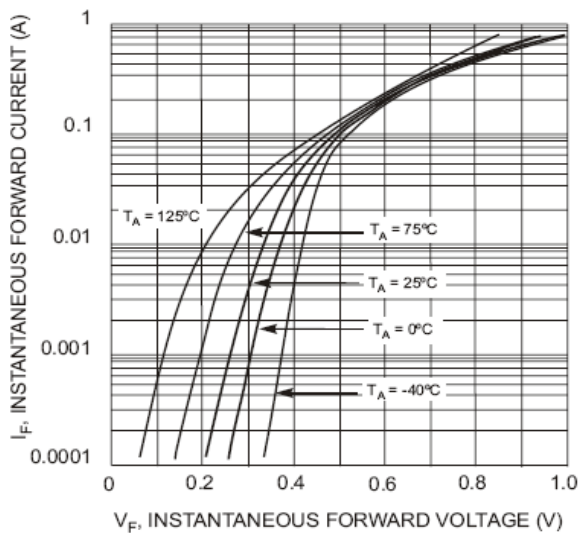
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#### ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	30		V
Average reverse current	$I_R$	$V_R=25\text{V}$		2.0	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$		0.24 0.32 0.4 0.5 1	V
Total Capacitance	$C_T$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		10	pF
Reverse Recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, R_L=100\Omega$		5.0	ns

#### TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



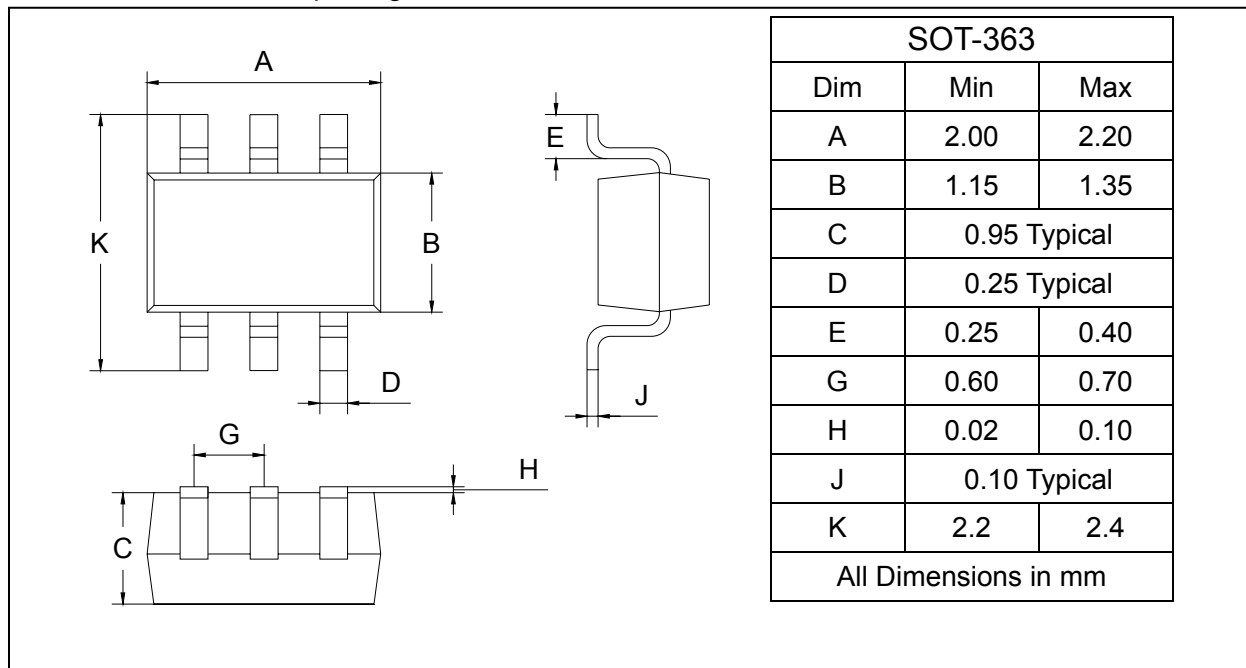
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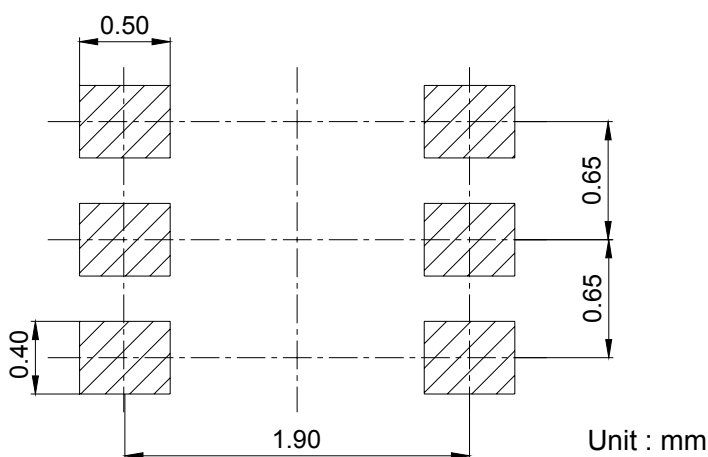
#### PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



#### SOLDERING FOOTPRINT



#### PACKAGE INFORMATION

Device	Package	Shipping
BAT54TW/BAT54ADW/BAT54CDW BAT54SDW/BAT54BRW	SOT-363	3000/Tape&Reel