

## Surface Mount Schottky Barrier Diodes

### FEATURES

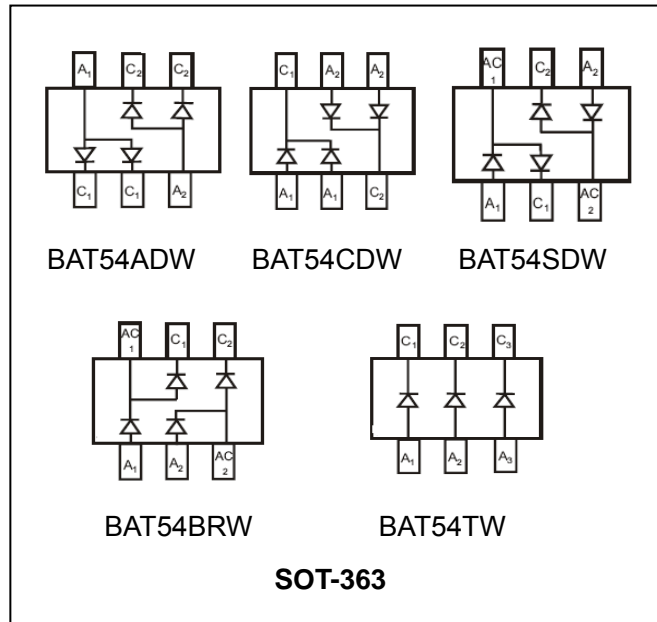
- Low forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN Junction guard ring for transient and ESD protection.
- Available in lead free version.



### 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
$V_{RRM}$	Repetitive peak reverse Voltage	30	V
$V_{RWM}$	Working peak reverse voltage		
$V_R$	DC reverse voltage		
$I_F$	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

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

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

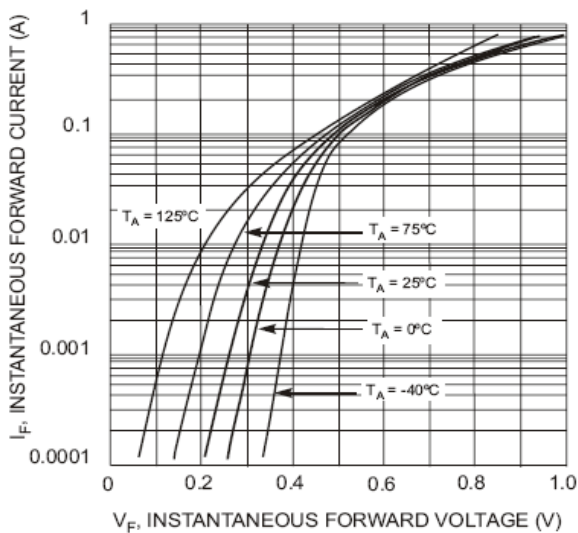
**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**


Fig. 1 Forward Characteristics

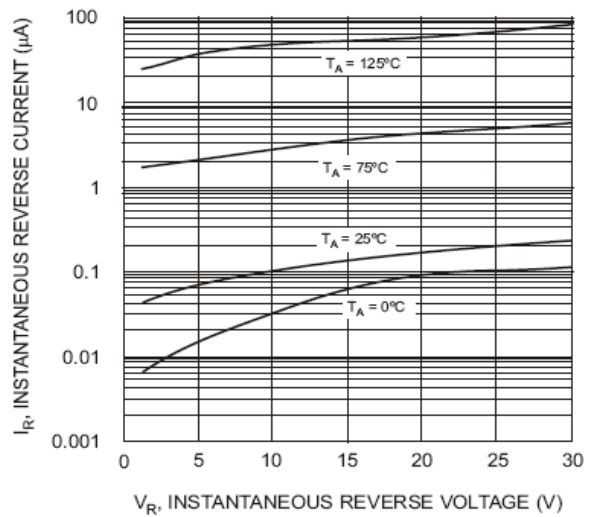
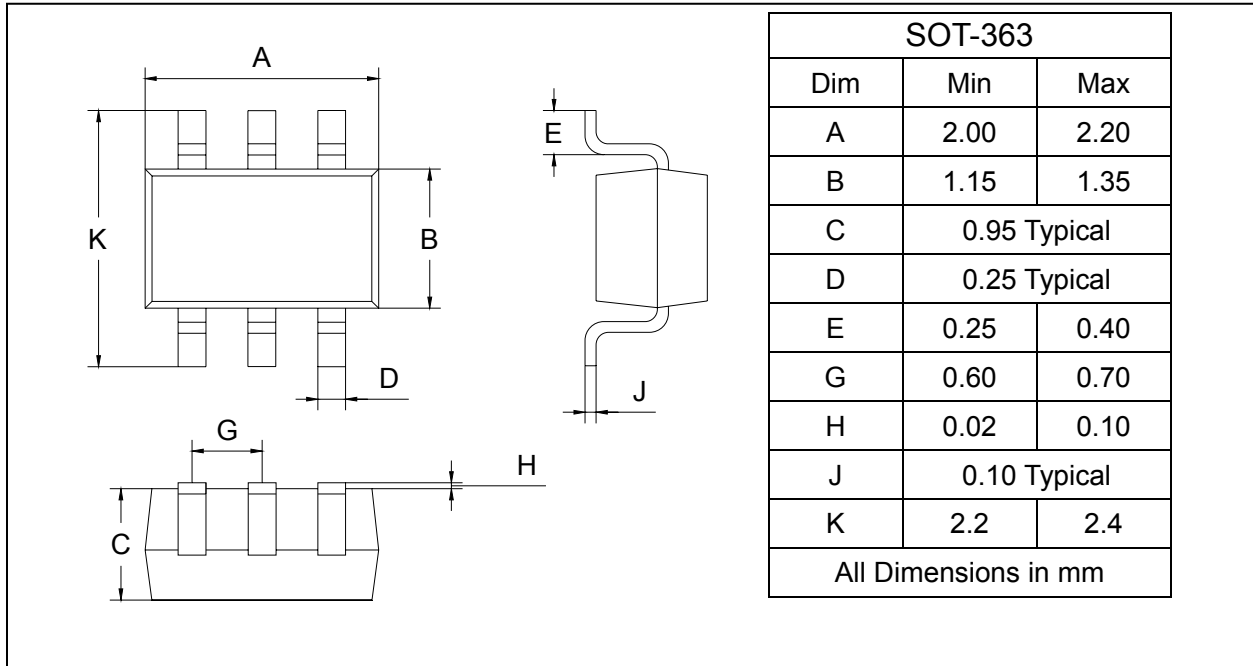


Fig. 2 Typical Reverse Characteristics

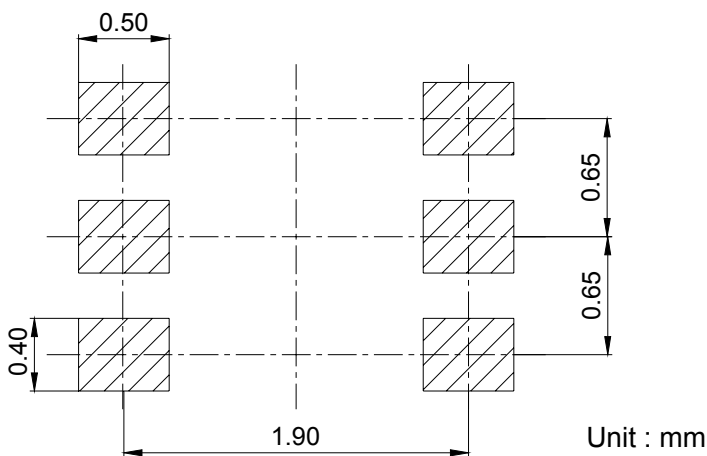
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

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