

Surface Mount Schottky Barrier Diodes

FEATURES

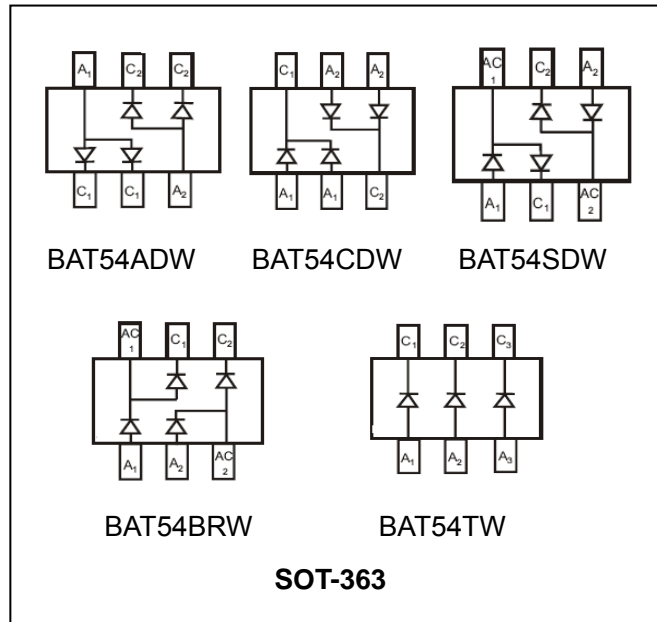
- Low forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN Junction guard ring for transient and ESD protection.
- Available in lead free version.



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	μA
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

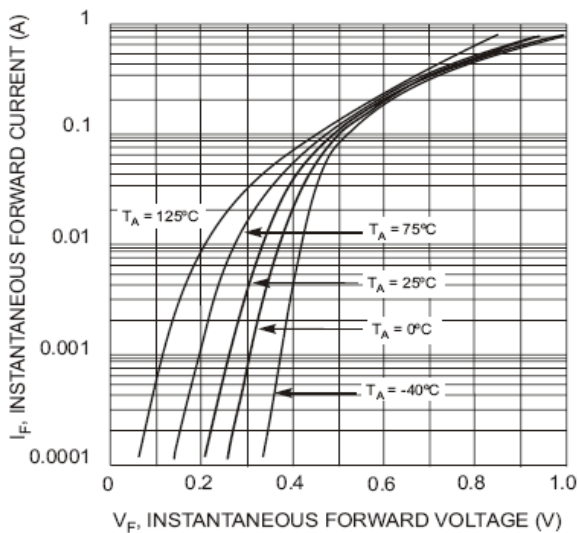
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified


Fig. 1 Forward Characteristics

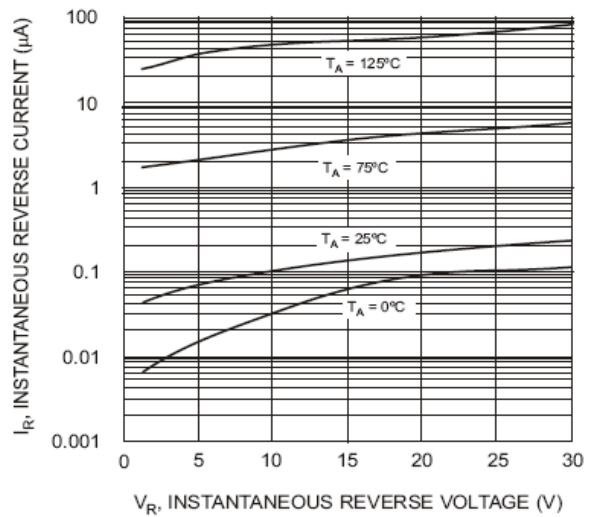
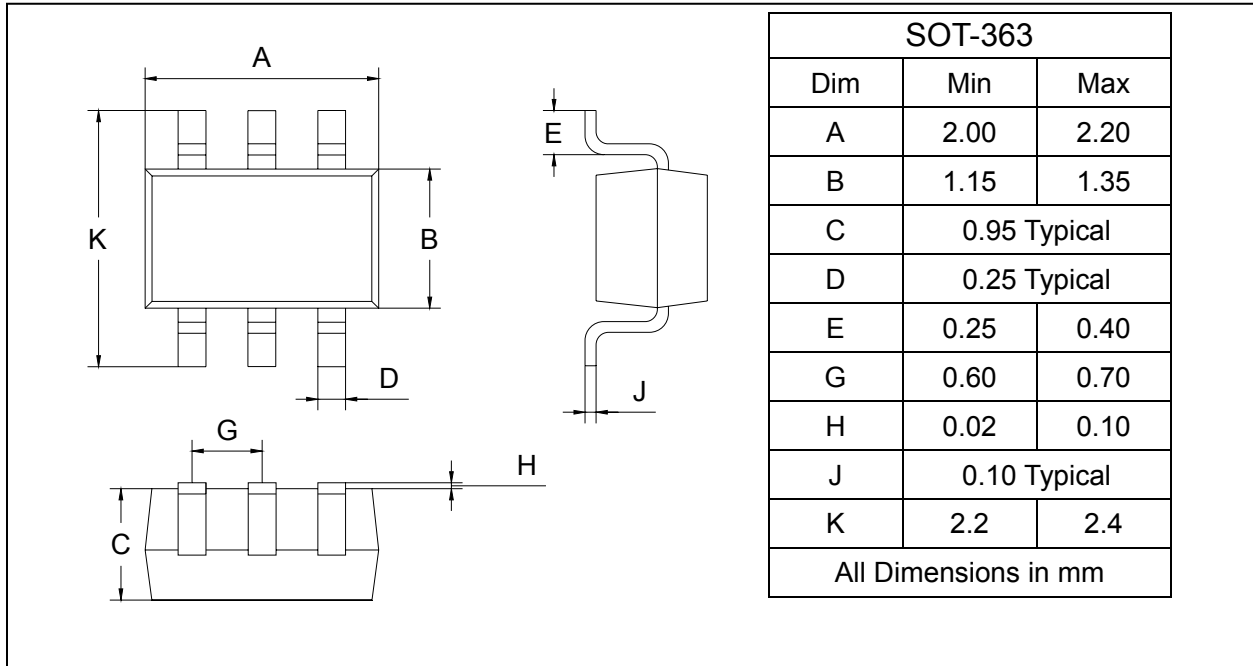


Fig. 2 Typical Reverse Characteristics

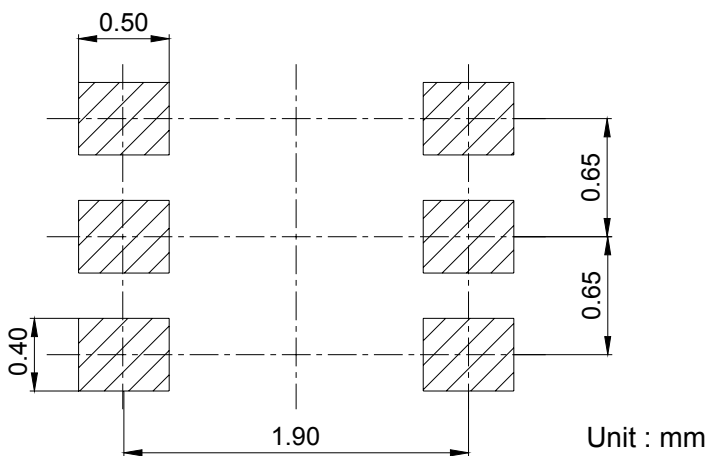
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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