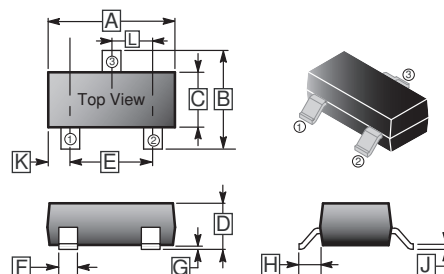


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

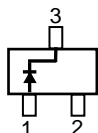
SOT-323

DESCRIPTION

- Fast switching speed
- For general purpose switching applications
- High conductance
- Surface mount package ideally suited for automatic insertion



MARKING: KA3



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		E	0.080	0.180
B	0.20 REF.		F	1.15	1.45
C	0.80	1.00	G	1.60	1.80
D	0.25	0.40	H	2.30	2.70

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Peak Forward Surge Current	@ $t = 1.0\mu\text{s}$	4.0	A
	@ $t = 1.0\text{s}$	1.5	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-65~150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	TEST CONDITION
Forward Voltage	V_{F1}	0.62	0.720	V	$I_F = 5\text{mA}$
	V_{F2}	-	0.855	V	$I_F = 10\text{mA}$
	V_{F3}	-	1.00	V	$I_F = 100\text{mA}$
	V_{F4}	-	1.25	V	$I_F = 150\text{mA}$
Reverse Current	I_{R1}	-	2.5	μA	$V_R = 75\text{V}$
	I_{R2}	-	25	nA	$V_R = 20\text{V}$
Capacitance Between Terminals	C_T	-	4	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse Recovery Time	t_{RR}	-	4	nS	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

RATINGS AND CHARACTERISTIC CURVES

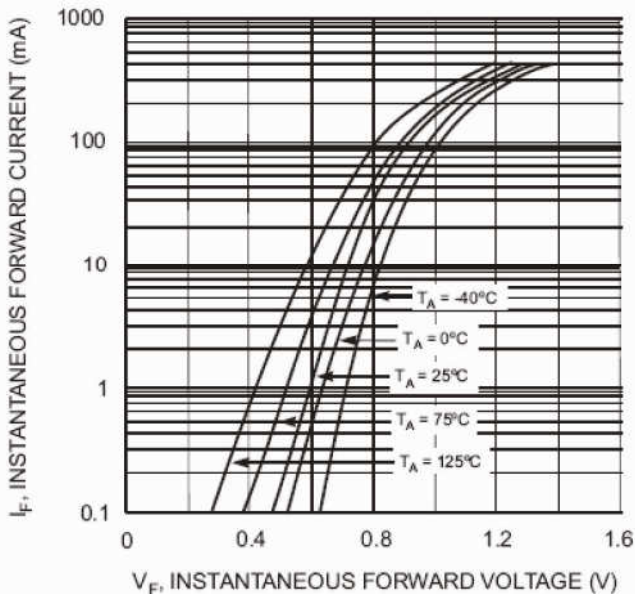


Fig. 1 Typical Forward Characteristics

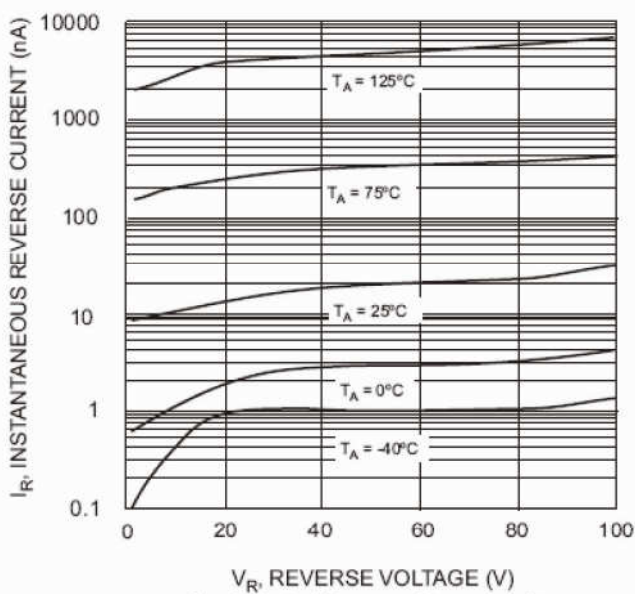


Fig. 2 Typical Reverse Characteristics

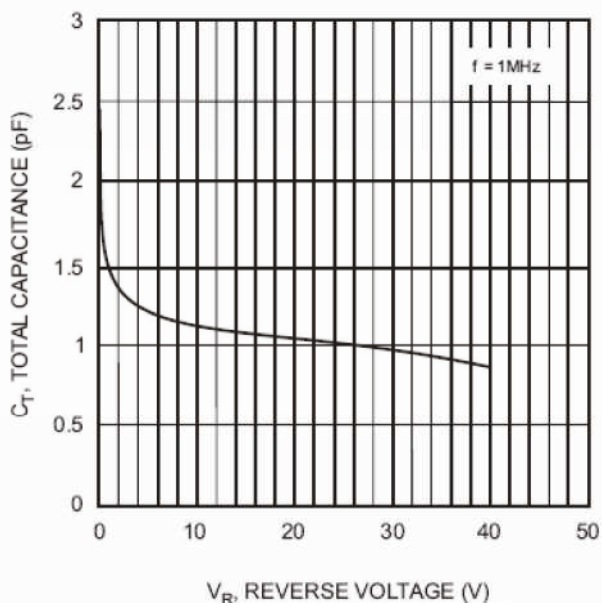


Fig. 3 Typical Capacitance vs. Reverse Voltage

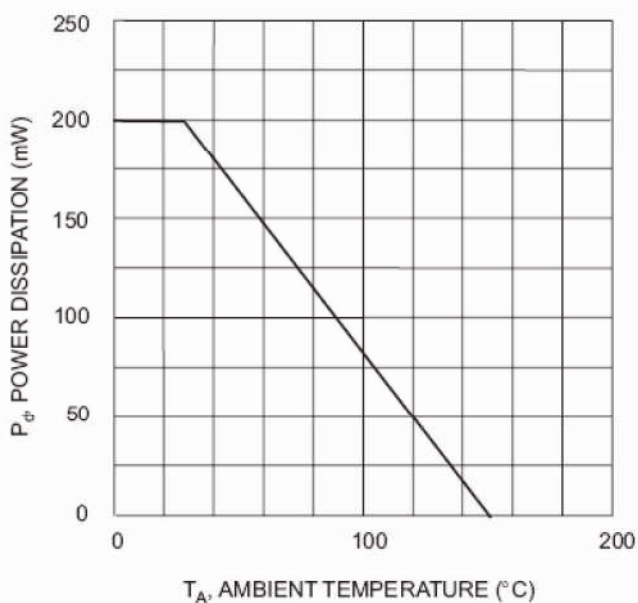


Fig. 4 Power Derating Curve, Total Package