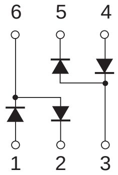
Plastic-Encapsulate Diodes

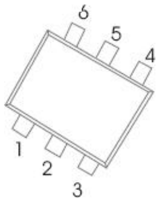
SWITCHING DIODE

FEATURES

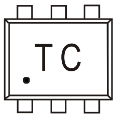
- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance



SOT-563



Marking: TC



Solid point=Pin1 positioning point

Maximum Ratings @Ta=25℃

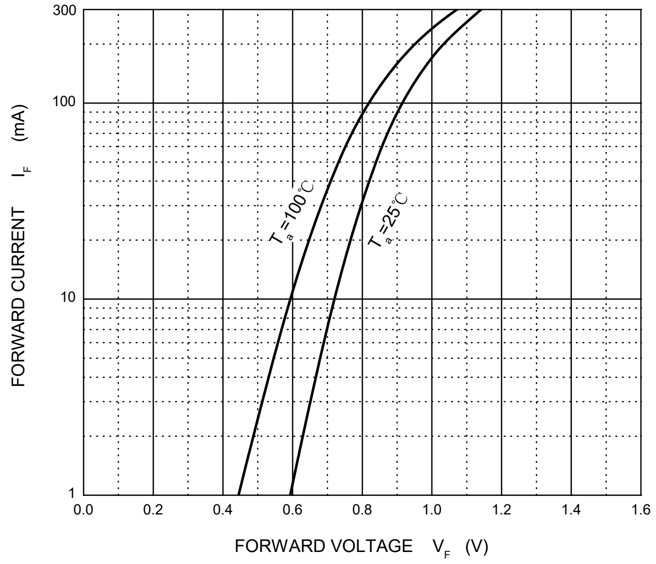
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current **@ t = 1.0μs** **@ t = 1.0s**	I_{FSM}	2 1	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	℃/W
Operating Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

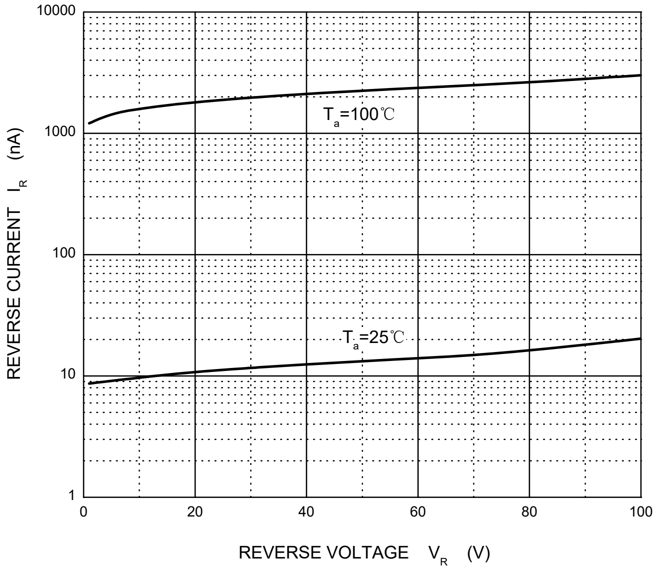
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=100uA	75		V
Reverse voltage leakage current	I_R	V_R=75V V_R=20V		2.5 0.030	μA
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA		715 855 1000 1250	mV
Junction capacitance	C_T	V_R=0, f=1MHz		2	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1×I_R, R_L=100Ω		4	ns

Typical Characteristics

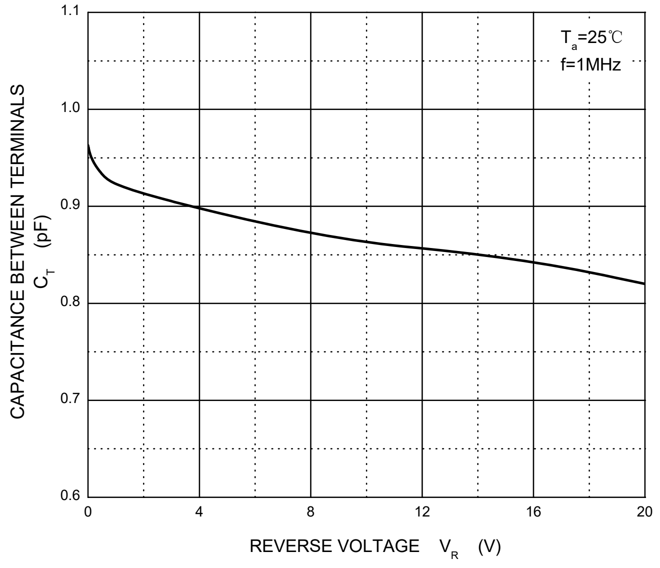
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve