

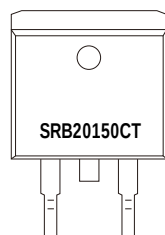
TO-262 Plastic-Encapsulate Diode

SCHOTTKY BARRIER RECTIFIER

FEATURES

- Low Power Loss, High Efficiency
- Guard Ring Die Construction for Transient Protection
- High Current Capability and Low Forward Voltage Drop

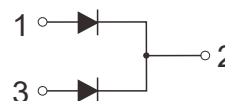
MARKING



TO-262



1 2 3



MAIN CHARACTERISTICS

I_O	20 (2×10) A
V_{RRM}	150 V
T_j	150 °C
$V_{F(typ)}$	0.71V (@ $T_j=125^{\circ}C$)

MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	150	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	105	V
I_O	Average rectified output current	20	A
I_{FSM}	Non-Repetitive peak forward surge current (8.3ms half sine wave)	150	A
$R_{\theta JC}$	Thermal resistance from junction to case , $T_c=25^{\circ}C$	2.0	$^{\circ}C/W$
$R_{\theta JA}$	Thermal resistance from junction to ambient	62.5	$^{\circ}C/W$
T_j	Junction temperature	150	$^{\circ}C$
T_{stg}	Storage temperature	-55~+150	$^{\circ}C$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1mA$	150			V
Reverse current	I_R	$V_R=150V$	$T_j=25^{\circ}C$	2.0	100	μA
			$T_j=125^{\circ}C$	2.0		mA
Forward voltage	V_F	$I_F=5A$	$T_j=25^{\circ}C$	0.76		V
			$T_j=125^{\circ}C$	0.64		V
		$I_F=10A$	$T_j=25^{\circ}C$	0.83	0.90	V
			$T_j=125^{\circ}C$	0.71		V

*Pulse test: pulse width $\leq 300\mu s$, duty cycles $\leq 2.0\%$.

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

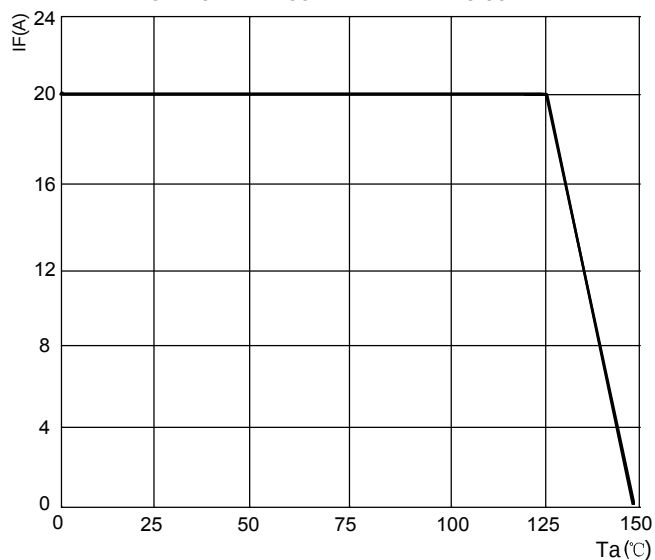


FIG.2: TYPICAL FORWARD CHARACTERISTICS

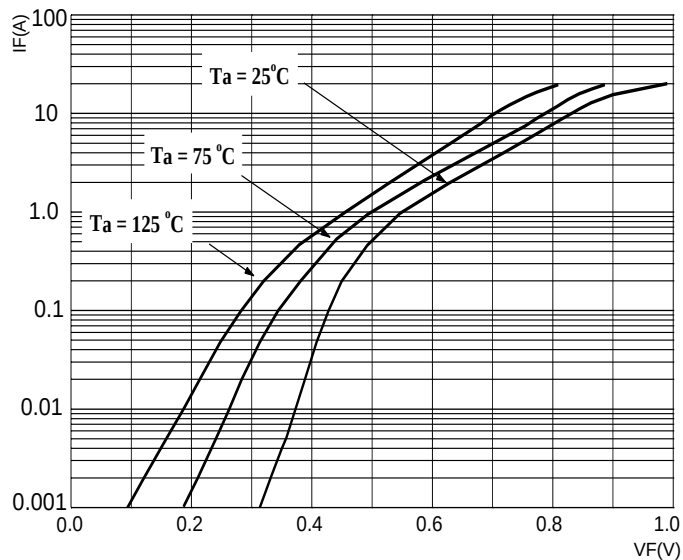


FIG.3: TOTAL CAPACITANCE DERATING CURVE

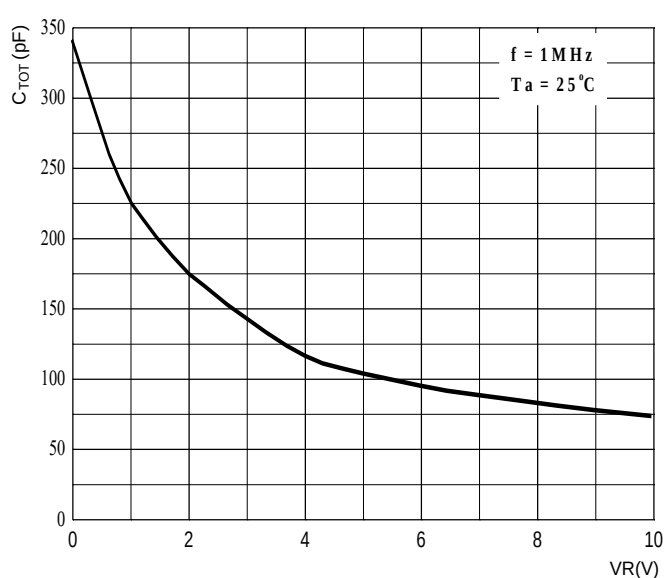
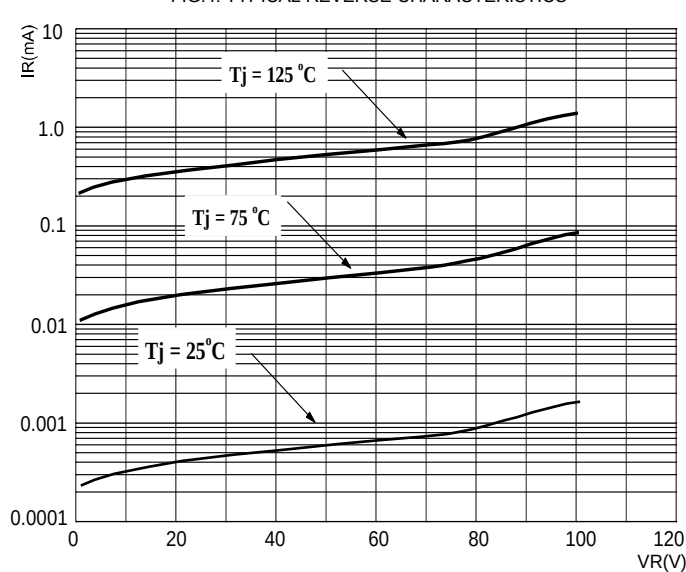
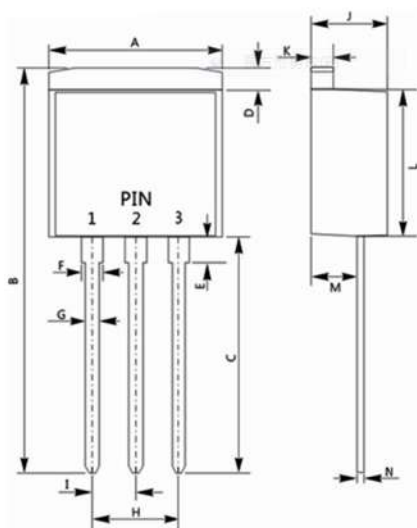


FIG.4: TYPICAL REVERSE CHARACTERISTICS



TO-262 Package Outline Dimensions

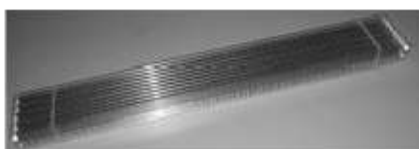


Dim.	Min.	Max.
A	-----	10.40
B	23.44	24.20
C	13.25	14.25
D	1.27	Ref.
E	-----	4.10
F	1.14	1.40
G	0.76	1.00
H	4.95	5.20
I	2.54	Ref.
J	4.40	4.80
K	1.25	1.45
L	8.60	9.00
M	2.50	2.80
N	0.35	0.56

All Dimensions in millimeter

Packing Information

Part Number	Package	Delivery Mode
KSRB20150CT	TO-262	50 pieces / tube



Part Number	Quantity	Size (mm)
tube	50 pieces	530*33*7
inner box	1000 pieces	560*150*40
outer container	5000 pieces	580*230*170