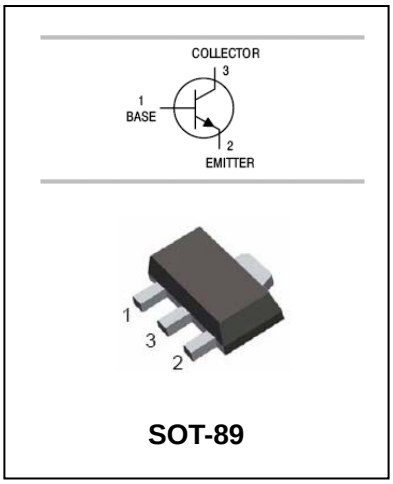
Medium power transistor(80V,0.7A) **2SD1767**

FEATURES

- High breakdown voltage and high current.
- Complementary pair with 2SB1189.

Lead-free



SOT-89

ORDERING INFORMATION

Type No.	Marking	Package Code
2SD1767	DCP/DCQ/DCR	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.7	A
P_C	Collector Dissipation	500	mW
$T_{j,}T_{stg}$	Junction and Storage Temperature	-55 to +150	℃

Medium power transistor(80V,0.7A) **2SD1767**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=50μA,I_E=0	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=2mA,I_B=0	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.5	μA
DC current gain	h_{FE}	V_{CE}=3V,I_C=0.1A	120		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=0.5A, I_B=0.05A		0.2	0.4	V
Transition frequency	f_T	V_{CE}=10V,I_C=50mA, f=100MHz		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		10		pF

CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
MARKING	DCP	DCQ	DCR

Medium power transistor(80V,0.7A) **2SD1767**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Fig. 1 P_C - T_a

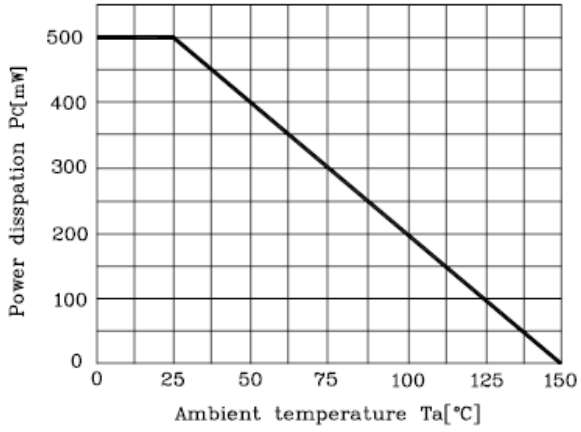


Fig. 2 I_C - V_{BE}

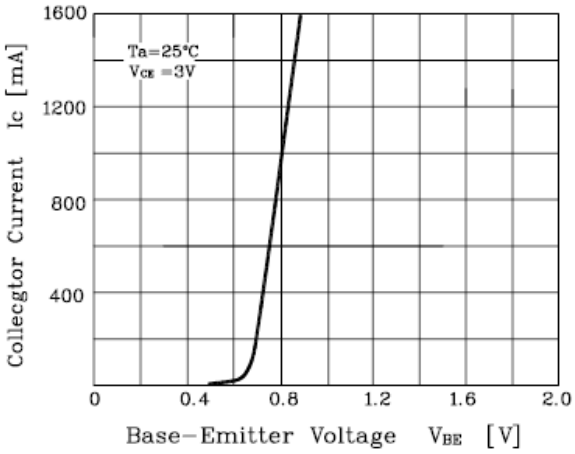


Fig. 3 I_C - V_{CE}

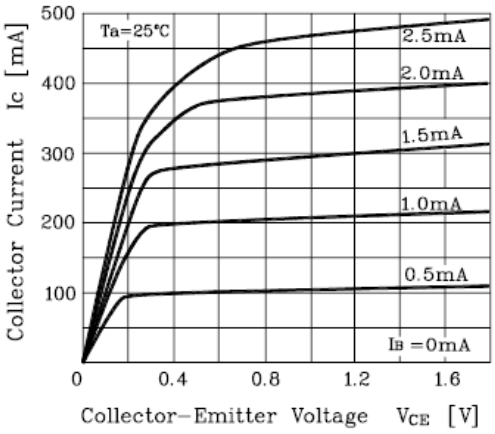
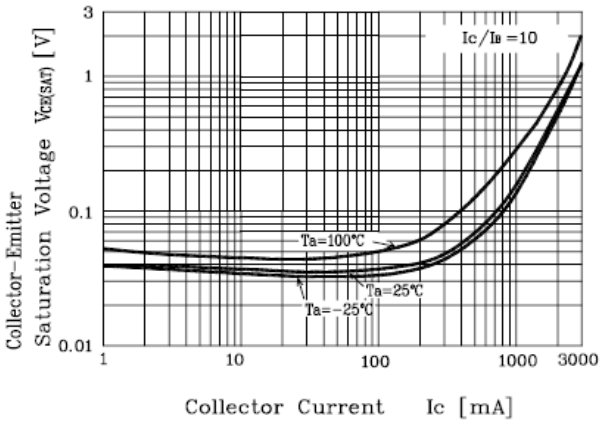


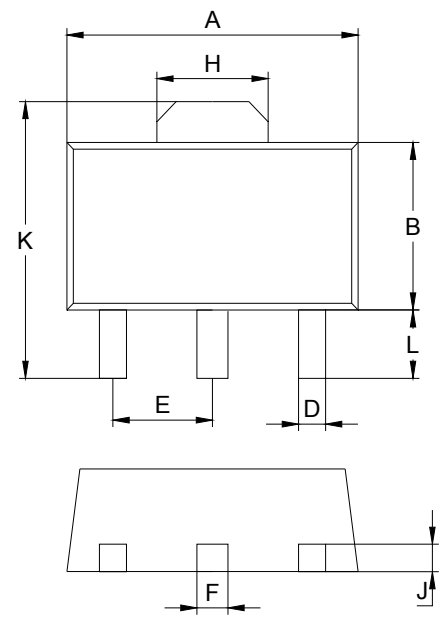
Fig. 4 $V_{CE(sat)}$ - I_C



Medium power transistor(80V,0.7A) **2SD1767**

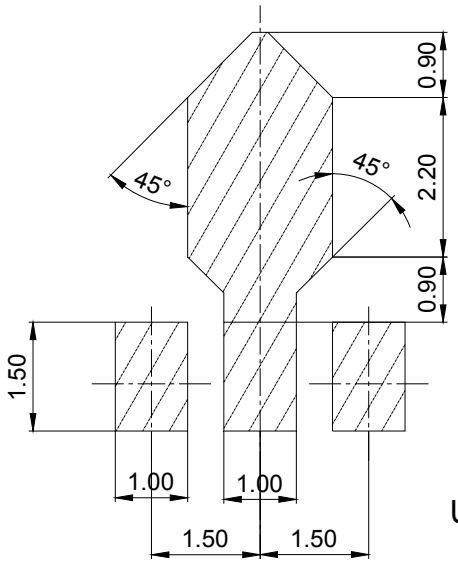
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.50 Typical	
D	0.40 Typical	
E	1.40	1.60
F	0.48 Typical	
H	1.60	1.80
J	0.40 Typical	
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
2SD1767	SOT-89	1000/Tape&Reel